REAL WORLD EVIDENCE

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ABSTRACT BOOK

3rd National Conference on Real World Evidence in Oncology

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VYDEHI INSTITUTE OF MEDICAL SCIENCES AND RESEARCH CENTRE, BENGALURU.

National Conference on Real World Evidence in Oncology

Preamble of the Conference

In today's rapidly evolving healthcare landscape, there exists a critical need for enhanced data sharing practices and transparency in oncology. Real-world data, sourced from patient registries, electronic medical records, and observational studies, offers invaluable insights into the effectiveness of cancer treatments and patient outcomes.

Collaborative Medical Oncology Group (CMOG) in association with the specific Structured Operational Research and Training Initiative (SORT IT) program jointly developed and implemented by: Fenivi Research Solutions Private Limited, Chennai, India; and the Union - Center for Operational Research, The Union, Paris, France, has resulted in eight original papers using the real-world data of twelve cancer centres. The success of this program has encouraged the CMOG team to conduct the National Conference annually on “Real world evidence in oncology (RWE)” to share the real-world medical oncology data.

The conference was conceived to bridge the gap between theory and practice, facilitating the exchange of real-world evidence to drive improvements in patient care.

Why Participate in RWE?

RWE offers an unparalleled opportunity for you to contribute to the advancement of oncology research and practice. By presenting your institutional data, you can:

- **Shape Future Practices**: Your data can offer invaluable insights that drive future treatment practices and enhance patient outcomes
- **Gain Recognition**: Participation in RWE allows you to showcase your institution's research and expertise, earning recognition from peers and industry experts.
- **Network and Collaborate**: The conference serves as a catalyst for networking and collaboration with leading oncologists, researchers, and healthcare professionals, fostering new partnerships and collaborations.

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Oral Presentation Abstracts

Solid Tumors-1

SOL-1 001

Safety and efficacy of modified triplet neoadjuvant chemotherapy (NACT) in esophageal squamous carcinoma (SCC)

Dr Kamesh Maske*, Dr. Vanita Noronha,Dr. Minit Shah,Dr. Nandini Menon,Dr. Nivedita Chakrabarty, Dr. Nilendu Purandare, Dr. Amit Janu,Dr. Kumar Prabhash

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Background: Triplet-NACT with 5-Fluorouracil based regimens is the standard-of-care in locally-advanced resectable esophageal SCC, however, they are difficult to administer in busy tertiary-care centers and associated with significant morbidity and mortality.

Objectives: To explore the safety and efficacy of triplet-NACT with modified capecitabine dosing (DCX-Regimen)

Materials And Methods: This was a retrospective study conducted at our institute between September'23 and April'24. Patients with esophageal SCC referred for NACT from the 'Multi-Disciplinary Joint-Clinic' (MDT-JC) were assessed for inclusion. Eligible patients were treated with Docetaxel (75mg/m^2, every 3-weekly), Platinum (Cisplatin/Carboplatin,every 3-weekly), and Capecitabine (650mg/m^2,PO,twice-a-day,daily).

Results: 23 patients were assessed. Median age was 53 years (IQR,48-54), and median baseline weight was 47kg (IQR,42-60). 65.2% (n=15) were males and all patients had ECOG-PS 0-1. 86.9% (n=20) had cT3-4 lesion, and 52.2% (n=12) had cN2-3 disease. 78.3% (n=18), 4.3% (n=1), and 17.4% (n=4) patients were deemed resectable, borderline resectable, and unresectable respectively, in the MDT-JC. 95.7% (n=22/23) patients completed the planned 3 NACT cycles. Dose reduction, dose delay, and grade ¾ toxicity was seen in 17.4% (n=4), 8.7% (n=2), and 34.8% (n=8) patients respectively. In response evaluable patients (n=21/23), objective-response-rate was 95.2% (n=20/21, CR-5/21, PR-15/21). 42.1% (n=8/19) of the resectable patients underwent surgery. pCR rate was 50.0% (n=4/8). There were no peri-operative deaths.

Conclusion: DCX regimen represents one of the safest and most effective triplet-NACT regimens for esophageal SCC and is currently being considered in two phase-III RCT's at our institute.

SOL-1 002

Real world data on treatment outcome of ALK positive Non-Small Cell Lung Cancer from an Indian multicentric cancer registry

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Introduction: The Anaplastic lymphoma kinase inhibitors (ALKi) represent the standard of care for metastatic non-small cell lung cancer (NSCLC) patients with EML4-ALK rearrangements. Various ALK are available however not all eligible patients receive treatment with them. Given the limited real-world data available in India, we aimed to assess treatment outcomes through a multicenter collaboration.

Materials and Methods: This retrospective, multi-institutional study was conducted under the Network of Oncology Clinical Trials India - a total of 67 ALK-positive metastatic lung cancer patients from 10 institutes across India were selected.

Results: In the first line setting, the objective response rate (ORR) with ALKi - 63.6% (crizotinib: 60.7%, ceritinib: 70%, alectinib: 66.6%, p 1⁄4 0.508); with chemotherapy- 26.1%. The median progression-free survival (mPFS) for the first line ALKi group was significantly higher than that for chemotherapy (19 vs. 9 months). The mPFS for crizotinib, alectinib, and ceritinib was 17, 22, and 19 months, respectively. ALKi showed superior mPFS compared to chemotherapy in the second and the third line. The median overall survival (OS) was significantly better in patients who received ALKi in any line of therapy (44 vs. 14 months, p < 0.001, HR 1⁄4 0.10, 95% CI: 0.04–0.23).

Conclusion: Use of ALKi as first line treatment for ALK-positive metastatic NSCLC patients resulted in improved PFS. PFS and ORR did not significantly differ in 1L/2L. The use of ALKi in anyline of therapy was associated with significantly prolonged OS.

SOL-1 003

Impact of Neoadjuvant Chemoradiotherapy on Pathological Response and Survival in Locally Advanced Esophageal Cancer: A Retrospective Single-Center Experience

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Background: Neoadjuvant chemoradiotherapy (nCRT) followed by surgery has emerged as a promising treatment strategy for locally advanced esophageal cancer. This study aimed to investigate the rate of pathological complete response to nCRT and assess its impact on overall survival and cancer-specific mortality in a cohort of patients with this condition.

Methods: In this retrospective study, we analysed data from 50 patients with locally advanced esophageal carcinoma treated at our Institution between 2018 and 2022. Patients were categorized into compliant (completed nCRT and surgery) and non-compliant (completed nCRT but did not undergo surgery or were lost to follow-up) groups. The nCRT regimen consisted of 41.4 Gy radiation in 23 fractions by IMRT with concurrent weekly Paclitaxel and Carboplatin.

Results: The compliant group had a significantly higher rate of pathological complete response (80%) compared to the non-compliant group. One-year overall survival was 85.1% in the compliant group versus 50% in the non-compliant group ($p<0.001$). Cancer-specific mortality rates were lower in the compliant group (28%) than in the non-compliant group (48%).

Conclusions: Compliance with nCRT followed by surgery was associated with a high rate of pathological complete response and improved overall survival in patients with locally advanced esophageal carcinoma. These findings underscore the importance of adherence to multimodal treatment protocols in this patient population.

SOL-1 004

ALK positive non-small cell lung cancer: Lorlatinib still effective as a subsequent line of treatment.

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Background: ALK gene rearrangement is identified in 3-5% of non–small-cell lung cancers (NSCLCs). Crizotinib was the first ALK inhibitor to get approved. Subsequently second generation inhibitors like Alectinib, brigatinib and third generation Lorlatinib have shown higher potency along with brain permeability.

Objectives: To observe the long term outcome of ALK positive NSCLC patients receiving Lorlatinib in successive lines.

Material & Methods: We analysed ALK positive NSCLC patients treated with Lorlatinib between Jan 2019 to April 2024, following progression on earlier generation inhibitors.

Results: A total of 10 patients received Lorlatinib as delayed therapy, media age was 50years, 5 males and 5 females. At a median follow up of 29 months, the median PFS has not been reached. The longest follow up was 62 months, 3 patients have crossed 3 years of treatment with lorlatinib. Three of the 4 patients with brain metastasis have continued to respond, and 1 patient succumbed. Adverse effects of grade 1-2 severity were noted in 6 patients, hyperlipidemia in 6 patients and are on statins, 2 patients had pedal edema with weight gain, 1 patient required dose modification.

Conclusions: Lorlatinib initially approved in delayed lines, now has approval as a first line agent in ALK positive NSCLC. Lorlatinib remains an effective treatment option at later lines following progression on earlier generation ALK inhibitors. However, it is important to bear in mind the side effects with the TKI, as these patients continue to respond and remain on treatment for a prolonged period of time.

SOL-1 005

The power of HER in lung cancer

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Introduction: Her2neu alteration is an upcoming target of interest in metastatic non-small cell lung cancer (mNSCLC).

Objectives: To analyse her2neu alterations in mNSCLC from a single centre and study their outcomes.

Material & Methods: Patients with her2neu alterations on NGS testing (blood/tumour) were analysed from March 2019 till December 2023. Median PFS (progression free survival) and OS (overall survival) was calculated.

Results: 10 patients (3.12%) from a total of 320 mNSCLC were identified. Median age was 63 years (46-93 years) with majority male (6,60%). 9 had adenocarcinoma subtype and 1 adenosquamous. Her2neu alterations were detected on comprehensive rather than hotspot NGS testing. Tumour NGS was used in 7, and blood NGS in 3 patients. Her2neu mutation at exon20 was seen in 7(70%), Her2neu amplification in 3(30%) and 2 had both. All patients received atleast one Her2neu directed therapy – trastuzumab, trastuzumab emtansine (TDM1) and trastuzumab deruxtecan(TDxd). 8 patients received trastuzumab+chemotherapy in 1st line and led to a PFS of 8 months (95%CI 0.98-15.0). 3 patients received TDM1 as 2ndline with a PFS of 3 months (95% CI 1.4-4.6). TDxd was given in later lines for 3 patients (all with her2neu mutation) and gave a PFS of 17 months (95% CI 5-28). mOS of entire cohort was 20 months (95% CI 12.8-27.2).

Conclusions: Our analysis showed that trastuzumab plus chemotherapy in 1st line gave a better mPFS compared to historical cohorts. TDxd in refractory setting led to a meaningful PFS of 17months in Her2neu mutations. OS of 20months is significant to warrant Her2neu testing with comprehensive NGS in mNSCLC.

SOL-1 006

Phase II trial of safety and efficacy after thrice weekly Osimertinib combined with standard of care chemotherapy in patients with Epidermal Growth Factor Receptor (EGFR) Positive advanced Non-small cell lung carcinoma (NSCLC)

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Background: The standard care for EGFR mutant advanced NSCLC is osimertinib 80mg daily. In India, this regimen is financially burdensome, leading many patients to use gefitinib, which has lower efficacy. This study explores alternate day osimertinib with chemotherapy to reduce costs while maintaining efficacy.

Rationale: Our rationale for a thrice weekly regimen of osimertinib stems from the findings of the initial trials of osimertinib (AURA) trial, where the ORR between the doses tried (escalating from 20 mg to 240mg) was not significantly different. As the efficacy with 40 mg od was not significantly different to 80 mg od, can the possibility of a reduced dose or a lesser frequency of the prescribed dose be considered in resource limited settings.

Methods: We conducted a Phase II trial with 39 patients with untreated EGFR-mutated advanced NSCLC, performance status 0-1. Patients received osimertinib 80mg on alternate days, combined with carboplatin and pemetrexed every 3 weeks for 4 cycles. The primary outcome was the objective response rate (ORR) at 12 weeks; secondary outcomes included pharmacokinetics, plasma levels, and adverse events graded per CTCAE v5.0.

Results: Trial in progress. Preliminary data of interim analysis will be presented at the conference

Hematooncology And Pediatric Oncology

HEM 001

Vedolizumab in Steroid resistant acute gastrointestinal graft-versus-host disease in children.

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Background: There is no standard treatment for steroid-resistant (SR) gastrointestinal (GI) acute GvHD (aGvHD), which has a poor prognosis. The anti-integrin antibody, vedolizumab, blocks lymphocyte extravasation and infiltration of the intestinal wall, thus might be useful in GI GVHD.

Objectives: To report the outcomes of Vedolizumab treatment of SR GI aGvHD in children.

Methods: We retrospectively analysed 4 children with grade IV SR aGvHD with GI stage 4 manifestation. Vedolizumab was given as salvage therapy after an ineffective treatment with steroids followed by etanercept ( ) and/ or ruxolinitib ( ). Vedolizumab dosing was based on weight as follows: 100mg for <10 kg, 150mg for 10-25kg, 300mg for >25kg on weeks 0,2,6 and every 8 weeks thereafter, if necessary.

Results: Four patients with PID (1), ALL (1) and AML (2) underwent allo HSCT with myeloablative conditioning. Donors were matched related in 2 and haploidentical in 2. PBSC were used in all. Median time between GI GVHD onset to vedolizumab treatment was 36 days (range 32–163 days), with a median of 3 doses (range 1–5) per patient. All achieved complete resolution of gut GVHD at a median duration of 33 days (range 22- 63 days) after first dose of vidolizumab. After a median follow-up of 13 months two patients are alive, two patients died (one had relapsed AML and one child had enterococcal sepsis). No infusion related adverse events were noted.

Conclusion: Vedolizumab can be safely used in children with SR GI aGvHD with excellent results. Large prospective randomised paediatric studies in SR GI aGVHD are warranted to confirm our findings.

HEM 002

Outcome of myeloablative Busulfan versus fractionated Total Body Irradiation conditioning in T-cell replete haploidentical hematopoietic stem cell transplantation in paediatric acute leukemia - A single center study.

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Background: Busulfan(Bu) or total body irradiation (TBI) based myeloablative conditioning(MAC) is the standard-of-care for pediatric acute leukemia. Bu pharmacokinetic monitoring is not feasible in majority of centers and CyTBI is associated with significant toxicity.

Objectives: Primary

1. Retrospective survival analysis of FluBu and Flu-fTBI MAC in haplo-HSCT in pediatric acute leukemia.
2. Cumulative incidence (CI) of regimen related toxicities, GVHD and relapses.

Methods: Total 57 patients who underwent haplo-HSCT with FluBu (n=27) or Flu-fTBI (n=30) MAC from 2019 till 2023 were enrolled. All patients received T-cell replete PBSC graft from related donor. Post-transplant cyclophosphamide (PTCy), calcineurin inhibitors and mycofenolate were given for GVHD prophylaxis.

Results: Though Flu-fTBI had universal engraftment, treatment related mortality was higher in Flu-fTBI (44.4% vs. 35.7%). Severe acute (25% vs. 19%) and chronic GVHD (17.8% vs. 7.6%) were higher in Flu-fTBI group. Similar relapse rates were observed in both the groups. With median follow up duration of 3 years and 1 year, the OS was 48% vs. 40% and EFS was 44% vs. 37% for FluBu vs. Flu-fTBI respectively.

Conclusion: Though this study includes small cohort of patients from a single center, this adds valuable data regarding the choice of MAC in pediatric acute leukemia.

HEM 003

Limited duration of brentuximab vedotin in relapsed or refractory Hodgkin's lymphoma: A long term single centre experience

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Introduction: Brentuximab vedotin(BV) has shown better outcomes compared to chemotherapy in relapsed/refractory Hodgkin's lymphoma(r/rHL) with trials using 16 or more dosing schedule.

Objectives: To analyse long term outcomes of r/rHL treated with limited duration BV.

Material & Methods: Patients from January 2013 till December 2023 with r/r HL who received BV from a single centre, were included, to study survival outcomes and toxicities.

Results: 11 patients received BV at 1.8 mg/kg/dose every 3 weeks. Median age was 32 years(16–57 years) with 6 females (54.5%) and 5males. All were pretreated with multiple lines of chemotherapy, immunotherapy (n=2) and prior autologous BMT history (n=3). All patients received maximum of 6 cycles of BV. Overall response rate was 100% with all achieving complete remission (CR) in 3 cycles. 4 patients underwent autologous BMT while in CR. 2 patients relapsed after BV at 15and 32months.At a median follow up of 5 years, mPFS was not reached. 5-year PFS rate was 75%, and 5-year OS rate 100%. The longest duration of response is 126 months. Common toxicities were neutropenia, peripheral neuropathy and fatigue (grade 1 or 2). No dose reductions were required.

Conclusions: Our long-term analysis showed that in r/r HL, just 6 cycles of BV showed remarkable and durable response, translating into prolonged survival. Limited dosing would bridge the cost benefit gap, especially in our financial constraint settings. BV has become our preferred regimen in r/r HL at our centre. Future studies to define the ideal sequence of BV versus immunotherapy in Indian patients are needed.

HEM 004

Pediatric Colorectal Carcinomas: Real World Experience from a Tertiary Cancer Care Center in Southern India

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Background: Pediatric colorectal cancers (CRC) are rare but serious conditions that can affect children and adolescents. Early diagnosis and treatment are crucial for improving outcomes of pediatric CRC.

Objectives: There is a lack of data from India regarding pediatric CRCs, hence we decided to do a retrospective audit of children and adolescents presenting with CRC at our institute.

Methodology: A retrospective analysis was conducted on pediatric cancer patients treated at Cancer Institute (W.I.A) from Jan 2011 to Mar 2024. Data on patient characteristics, response rates, and outcomes were collected and analyzed.

Results: The study included 14 patients aged 14.3 ± 3 years (range 9-18), mostly males (9/14, 64.3%), with a median time since diagnosis of 6.5 years (4 months - 12 years). Most common symptoms were pain (86%) and bleeding per rectum (43%), with few patients presenting with a palpable lump per abdomen (14%). Recto-sigmoid is the most common location (4/14), followed by ascending and descending colon (3/14 each), transverse colon (2/19), and 1 case presenting in the appendix and 1 with distant metastasis. Loss of Mismatch repair (MMR) protein was seen in 3/3 tissue specimens tested; one child had KRAS mutation tested and was positive. No patient had a positive family history. All cases presented with advanced stage (8/14 in stage 3 and 6/14 in stage 4). Surgery was the initial treatment for (6/14, 42.3%) of patients, followed by Palliative Chemotherapy for 5/14, 35.71%. Among those who progressed and sought further treatment, second-line palliative chemotherapy was given to 83.3% of patients. The median follow-up in surviving patients was 55 months, with 2-year PFS and OS of 21.4% and 50%, respectively.

Conclusion: This study highlights the aggressive nature of CRC in pediatric patients, with a high proportion presenting at advanced stages and requiring palliative chemotherapy. Mismatch repair protein loss was identified in all patients tested despite no patient having a positive family history, underscoring the importance of early screening for hereditary cancers within the family.

HEM 005

Outcome of Adult Acute Myeloid Leukemia patients treated with Decitabine + Venetoclax at a tertiary care centre in South India

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Background: Venetoclax was the major breakthrough in the treatment of elderly AML patients, associated with better complete remission (CR) rates but relatively less mortality compared with 7+3 chemotherapy. MDR infections are common in our setting leading to high mortality. Hence, we decided to treat our fit adult AML patients with Decitabine+Venetoclax.

Aim: To analyse the outcome of adult AML patients treated with Decitabine+Venetoclax

Method: Retrospective analysis of all Adult AML patients >20 years treated at our centre between 2021 june till may 2024 was analysed.

Results: 37 Adult AML patients with median age 46 years (24-76) were included. As per ELN 2022 risk stratification, 4, 17 and 11 patients were in favourable, intermediate and adverse risk respectively. Mutation data was not available in 5 patients. 10 had induction death (27%)- 4 high risk, 1 intermediate, 5 had no mutation data. 24 patients had morphological complete remission following 1 cycle decitabine+venetoclax (65%). 3 had persistent disease following 1 cycle- 1 in each risk category, later treated with CLIA+Venetoclax (1), 2nd cycle decitabine+Venetoclax (1), FLAG-IDA+Venetoclax (1)- all of them achieved remission. Serious Induction complications occurred in 13 patients including fungal pneumonia in 6 patients. 8 patients had MDR sepsis. Median follow up duration- 36 months and Median OS- 9.5 months (1-36). 5 patients underwent AlloHSCT, as they had either high risk disease or refractory AML responded with salvage chemotherapy.

Conclusion: Decitabine+Venetoclax is well tolerated and effective among young adults. However, Induction mortality is still significant due to MDR infections.

HEM 006

Retrospective analysis of clinical manifestations and treatment outcomes of pediatric patients diagnosed with Langerhans cell histiocytosis (LCH)

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Introduction and Objectives: This study analyzes clinical manifestations and treatment outcomes of children with Langerhans cell histiocytosis (LCH) in our hospital, a neoplasm arising from myeloid cell expansion in the bone marrow, eventually differentiating into CD1a+/CD207+ cells.

Methodology: A retrospective analysis was conducted on pediatric patients under 18 years old with biopsy-proven LCH at the Cancer Institute, WIA, from January 2012 to December 2023. Data on patient characteristics, response rates, and survival outcomes were collected and analyzed using the Kaplan-Meier method.

Results: The study involved 15 patients, with a median age of 6 years (Range: 2-14 years), of which 8/15, 53% were female. In the majority of cases, only non-risk organs were involved (14/15, 93.3%). Additionally, 10/15, 66.7% of patients had single-site disease, with the majority being multi-focal (6/10). Bone was involved in all cases with the cranium being the most common site of bone involvement (11/15). CNS-Risk disease was seen in 7/11, 64% of patients with cranial bone involvement. Four out of fifteen patients were managed with surgery alone, while the rest received first-line chemotherapy according to the LCH III protocol, Stratum I (Steroid and Vinblastine). After first-line chemotherapy, 5 patients achieved complete response (CR), 4 had partial response (PR), 1 had stable disease (SD), and 1 had progressive disease (PD). Patients with incomplete response received second-line chemotherapy with Prednisolone and Vinblastine for 6 weeks. Post-second-line treatment, 2 patients had CR, 2 had PR, and 1 had PD. Patients who achieved CR or PR post-first-line or second-line treatment received maintenance therapy with vinblastine and prednisolone until week 52. All patients went into CR. One patient with progressive disease post-second line received lenalidomide and dexamethasone followed by maintenance therapy with vinblastine and prednisolone, resulting in CR. Median follow up is 16 months (Range: 3-93 months) and all patients are alive and in remission at the time of analysis. Overall, there were no grade III or grade IV adverse events during the study.

Conclusion: In a cohort of predominantly non-risk organ LCH, response to Vinblastine and steroids was excellent. Maintenance therapy with vinblastine and prednisolone was effective in achieving complete remission in all patients who received it. Special attention must be paid to accurately stratify these patients to CNS-risk disease to ensure that chemotherapy is not overlooked following complete resection.

HEM 007

Treatment outcomes of All -Trans-Retinoic acid,Arsenic trioxide and Daunorubicin in High risk Pediatric Acute Promyelocytic leukemia a single center study at quaternary care center.

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Background: All-trans retinoic acid (ATRA), arsenic trioxide(ATO), and daunorubicin(DNR) therapy, followed by ATRA and arsenic trioxide consolidation therapy, have been found beneficial for treating adults with high-risk acute promyelocytic leukemia (APL). However, it remains unclear whether similar regimens are both safe and beneficial for treating high-risk APL in pediatric patients.

Materials and methods: In this retrospective study, we included 19 of 30 children <18 years with newly diagnosed high risk acute promyelocytic leukemia from a quaternary care center in South India (vijayawada) between January 2015 to December 2023 treated with ATRA, ATO and DNR in induction followed by ATRA and ATO consolidation

Results: Among 19(63.3%) high risk APML children included in this study there are 10 boys and 9 girls. Excluding 8(42.1%,7 IC bleed,1 renal failure) patients who died before starting ATRA,ATO and DNR, 9(75%) achieved complete remission, 2(16.6%) patients died(1 IC bleed,1Ileal bleed) during induction. Differentiation syndrome occurred in 3 children.One patient had QT prolongation requiring treatment modification. On long-term follow-up of patients who achieved complete remission, none developed relapse,the 8-year overall survival (OS) and relapse rates were 100% and 0%, respectively.

Conclusion: This study demonstrated that the combination of All-Trans-Retinoic acid, Arsenic trioxide, and Daunorubicin for induction, followed by All-Trans-Retinoic acid and Arsenic trioxide for consolidation in high-risk Pediatric Acute Promyelocytic Leukemia, showed favorable outcomes. Extrapolating adult data to the pediatric population showed benefit in pediatric Acute Promyelocytic Leukemia (APL).

HEM 008

A Prospective Study for Use of Fixed, Low Dose 1.5 mg Rasburicase for the Treatment of Hyperuricemia in Adult Oncology Patients.

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Background: TLS is a serious medical condition with high morbidity and mortality, primarily due to hyperuricemia. Rasburicase is effective in rapidly reducing uric acid levels but is costly. This study evaluated the efficacy of a single fixed low dose of 1.5 mg rasburicase in treating hyperuricemia.

Methods: A single-center prospective study enrolled 60 oncology patients aged over 15 years with hyperuricemia (uric acid >8 mg/dL) and ECOG PS ≤ 3. Patients received single 1.5 mg dose of rasburicase. Additional doses given at the clinician's discretion.

Aims and objectives: Estimate the plasma uric acid response rate, the need for additional doses, dialysis, TLS-related mortality, adverse events.

Results: Of the 60 patients, 75% achieved normalization of UA at 24 hours, and 81.66% at five days with a single dose. The overall response rate, including who received additional dose, was 95%. Subgroup analysis revealed UA levels less than 12 mg/dL had higher responses. Weak correlation was found with weight, bsa, tlc and uric acid levels.

Conclusion: A single fixed dose of 1.5 mg rasburicase is effective in treating hyperuricemia in adult oncology patients. This dosing strategy is cost-effective and may reduce the need for higher. Further research is needed to confirm optimize dosing strategies for rasburicase in this patient population.

Solid Tumors- 2

SOL-2 001

DPyD screening – "Opening the Pandora's box in Indian population": A pilot study

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Background: Mutations of DPyD can result in severe adverse reactions and even death in patients receiving fluoropyrimidines, a common chemotherapeutic agent. The spectrum of mutations and their clinical significance in Indians is not well characterized to date; resulting in unexpected toxicity in many patients.

Aims & Objectives: To describe the spectrum of DPyD mutations in the screened population. To find causal associations between mutations and possible Treatment Related Adverse Events (TRAE)

Methodology: A Prospective analysis of all patients tested for DPyD deficiency between 1st January 2023 to February 29 2024, for a period of 4 chemo cycles. The incidence of TRAEs were noted and correlated with DPyD screening result.

Results: Of the 101 cases screened, 95 were analysed of whom toxicity (any grade) was seen in 30 (31.6%) patients [Grade III/IV toxicity-11, death-2 (One in DPD wild type and one in a poor metaboliser mutation)]. Eleven required hospitalisation. Pre-emptive testing was done in 83 and for 12 after toxicity. Mutations were detected in 62 / 95 cases (65.4%) of which 22 (35.5%) patients had TRAEs -any grade and 9 - grade III/IV - including 1 death. In the remaining 33 wild-type patients, 8 had toxicity (any grade) and 2 - grade III/IV- including 1 death. The most common mutation was c. 85T>C *DPYD**9A p.C29R (n=45) followed by c.2194G>A *DPYD**6 p.V732I (n=20) of whom 40% & 50% had toxicity which did not correlate with CPIC recommendations except in 1 case. Two patients had non-functional mutations causing death in one and grade 4 toxicity in the other.

Conclusion/Key Take Away: The spectrum of DPyD mutations in our study seemed different from the Dutch and CPIC databases. The toxicity did not correlate with CPIC recommendations, needing an entirely different dose modification guideline for Indian population.

SOL-2 002

Clinicopathological Profile of Neuroendocrine Tumors: Data from a Multicenter Collaborative Registry in India

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Background: Clinicopathological features of neuroendocrine tumors (NETs) differ from those observed in Western populations and vary across different Indian states. There is limited data on the presentation and pathology of neuroendocrine tumors from India. We present the data on the clinicopathological features of NETs from a multicenter registry.

Methods: Data of patients with NETs registered at six centers in India between January 2018 and December 2022 were collected from patient records (retrospectively). Ethics committee approval was obtained from all centers for the data collection and analysis. We collected details regarding their sociodemographic profiles, histopathology, and treatment.

Results: A total of 174 NET patients were enrolled between 2018 and 2022. Among them, 85.6% (n=149) were gastroenteropancreatic (GEP-NETs), with a male predominance of 62.6% compared to 37.4% females. The median age at the presentation was 52 years (range: 14-75). The most common primary tumor site was the small intestine (27.5%, n=48), followed by the pancreas (24.7%, n=43), large intestine (12%), and stomach (10.3%). The least common sites were the mediastinum, bladder, and esophagus (n=8). According to WHO tumor grading, G2 was the most common (n=51), followed by G1 (n=48), with G3 being the least common (n=25), while no grade was assigned in 50 (28%) patients. The most common symptom in our cohort was abdominal pain (n=96). Of the 79 patients who underwent DOTA PET, 74.6% (n=59) showed SSTR uptake. Over 70% of patients had metastatic disease, with the liver being the most common site, followed by bones and lungs. Octreotide LAR and CAPTEM were our cohort's most commonly used treatment regimens, while only 11.4% of patients received PRRT as part of their treatment.

Conclusions: This study is among India's first multicenter collaborative efforts to examine the clinicopathological profile of NET patients. GEP-NENs are the most frequently observed NETs, with the small intestine being the most common primary site, consistent with global data. Although carcinoid syndrome can be a presenting complaint, its incidence was lower in our study. Most patients presented with metastatic disease at the initial diagnosis and received octreotide. However, very few patients received PRRT as part of their treatment.

SOL-2 003

Safety and efficacy of Lenvatinib in advanced Hepatocellular carcinoma: A single institution experience

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Background: Hepatocellular carcinoma (HCC), the most common form of liver cancer, is the third leading cause of cancer-related deaths. The efficacy of Lenvatinib in Indian population is insufficiently defined.

Objective: To describe the efficacy and toxicity profiles of lenvatinib among HCC patients in real life.

Methods: We included all patients who received lenvatinib as first line treatment for advanced HCC at our institution, from 2019 to 2023. Data was collected retrospectively from the electronic medical records to assess efficacy and AEs (type, rate, and severity, rates of dose reduction, discontinuation due to AEs). Safety analysis was done for all the patients seen during this period. Patients having full follow up data were only included in the efficacy and survival analysis.

Results: 370 patients were treated with lenvatinib as first line systemic therapy. Median age was 66 years (range 27-90), 343(93%) were male, and 27 (7%) were females. 7% of the patients underwent dose reduction, 7 (2%) dose modifications, 44 (12%) experienced dose interruptions, 15 (4%) stopped due to AE and 13 (4%) stopped due to progression. 39% patients had received prior treatment for HCC, specifically microwave ablation 62 (43%), transarterial chemoembolization 44 (30%), RFA 29 (20%), and resection 12 (8%). At a median follow-up of 346 days, 68 (18%) of patients had ceased treatment with lenvatinib. Reasons for stopping therapy were disease progression 26 (7%), intolerance 15 (4%), and death while on therapy 38 (10%). Among the 220 patients with evaluation of tumor response during treatment, overall response rate (ORR) was 1.3%, and disease control rate was 68%. The median progression-free survival (PFS) was 7.9months. Median OS was 11.4 months.One year survival was 38.4 ± 0.2 %.

Conclusion: The safety profile of lenvatinib in our cohort was similar to that reported in the literature, with a predominance of loss of appetite, hand-foot skin reaction and fatigue. As for efficacy, although less than in the REFLECT trial, ORR and PFS were similar to other real-life studies.

SOL-2 004

Outcome among patients with epidermal growth factor receptor mutations in non-small cell lung cancer from a tertiary cancer center in northern Kerala

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Background: Outcome of patients with EGFR mutation receiving tyrosine kinase inhibitors (TKI) is known to be better across different ethnic populations. However, frequency of EGFR mutations and the clinical response in patients from our state has not been studied. Hence, this study was undertaken.

Aims & Objectives: To study pattern of EGFR mutations and outcomes of patients with sensitizing EGFR mutation in non-squamous non small cell lung cancer who received TKI.

Materials and Methodology: This was a retrospective study and was approved by the Institutional Review Board (IRB) of Malabar Cancer Centre. All patients who underwent testing for EGFR mutation at our inhouse facility between 2017-2021and who had EGFR mutation were included in the study. Baseline characteristics, treatment details, and outcomes were analyzed.

Results: EGFR testing was done for 914 patients and EGFR mutations were observed in 230 patients (25%). Median age of patients with any form of EGFR mutation was 63 years. Majority were males (59%). Performance status at diagnosis was 2 or better among 173 patients. Half of the patients were never smokers. Two hundred fifteen patients were stage 4 at diagnosis. A large majority had adenocarcinoma histology with TTF-1 IHC positivity in 158 patients. Sensitising EGFR mutations i.e. exon 19 deletion and L858R mutation was seen in 170 patients (74%).Remaining had uncommon or compound EGFR mutations. Tyrosine kinase inhibitors (TKI) were received by 154 patients. Sixty four patients had partial response and another 9 patients had stable disease as best response to TKI. Median follow up was 9 months in this retrospective study. Median progression free survival (PFS) among patients who received TKI was 8 months while median overall survival (OS) was 20 months. Skin rash was the most common side effect observed in 25% (N=67) of patients.

Conclusion: There is variability in prevalence of different types of EGFR mutations and outcomes of such patients with TKI. There is a need for further studies specifically for molecular characterization of lung cancer from our region.

SOL-2 005

A Study to analyze the outcomes of limb salvage surgery using modular endoprothesis for bone tumors around the knee joint - A Retrospective study from a tertiary cancer centre.

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Background: Knee(distal femur and proximal tibia) is the most frequent site of primary bone tumors. Earlier the treatment of majority of these tumors were amputation but in the last few years, the concept of limb salvage surgery has gradually developed & advancements in musculoskeletal tumor management has given both surgeons and patients better treatment options and better quality of life.

Objectives: To assess the functional outcome after limb salvage surgery using modular endoprosthesis for bone tumors using Musculoskeletal tumor society score (MSTS).

Methods: A reterospective study of 122 patients from 2012-2021 operated at our institute with an average follow up of 5.6 years. Inclusion criteria – Malignant tumors around knee,amenable for limb salvage. Exclusion criteria- Tumors involving artery, nerve and extensive muscular involvement not amenable for limb salvage surgery.

Results: Total number of patients (n=122), majority males (n=77) and females (n=45). Majority were GCT of bone followed by osteosarcoma, Chondrosarcoma and rarest Ewings sarcoma. Distal femur tumors (n=69) proximal tibia tumors (n=53). Average MSTS score for distal femur was 76.47, proximal tibia was 71.11 and overall MSTS score was 73.96.

Conclusion: Patients undergoing distal femur endoprosthetic reconstrucion has better MSTS score and better quality of life compared to patients with proximal tibia reconstruction.

SOL-2 006

Tangible insights from Prostate cancer : Real world evidence from a tertiary cancer care centre in India

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Background: There are only very few studies available on Prostate cancer from India and hence this study done in a regional cancer care centre becomes very relevant.

Objective: To study the demographic and clinicopathological profile, treatment options and subsequent outcomes of patients with prostate cancer

Methods: This is a prospective single centre study among 118 newly diagnosed Prostate cancer patients from the year 2020 to 2023 . Detailed clinical history , examination findings and baseline PSA of the patients were recorded and risk stratification and staging were done as per the NCCN 2024 guidelines

Results: The median age at presentation was found to be 69 years with majority of patients (42.4%) having PSA values >100 ng/dL and with Gleason Grade score of 5 (43.2%). Histopathologically , majority of the prostate cancers were Adenocarcinoma (84.7%) and 18 cases (15.3%) were found to be NEC. 29 patients were Clinically localised , 10 regional and 79 were metastatic prostate cancers. Majority of the Clinically Localised prostate cancers belonged to the NCCN risk group 4 (n=17; 58.6%). Majority of the metastatic prostate patients were found to have Low volume disease (65.8%) 82 patients (69.4%) were diagnosed with relapse.

Conclusion: Prostate cancer seems to be quite aggressive in Indian patients with regards to median age at presentation (a decade earlier as compared to western data) , higher PSA levels , Gleason Grade Group , de-novo NEPC and higher incidence of metastatic disease. Among the clinically localised disease cohort, there was a higher incidence of high risk disease.

PSYCHO, PREVENTIVE, PALLIATIVE AND DIAGNOSTIC ONCOLOGY

PSY 001

Molecular Characterisation Of Gastric Tumours In A South Indian Cohort And Their Clinical Correlation

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Background: The prevalence of gastric cancer is high in Asian countries. There is a gross heterogeneity in the clinical outcomes and recurrence patterns possibly due to varied underlying molecular mechanisms driving differences in cancer aggressiveness and treatment outcomes. The developments in next generation sequencing platforms has enabled the genome-scale identification of molecular dysregulations and the possible genomics-guided stratification of tumors for prognosis and eventually targeted therapeutics.

Aim: To stratify gastric tumors into novel genomic subtypes based on the differential activation of 21 oncogenic signaling pathway specific gene sets and its association with histological characteristics and clinical outcomes.

Materials and Methods: All the patients underwent surgery at Meenakshi Mission Hospital, tumour bits were preserved in both liquid nitrogen and RNA Later. Genome-wide expression profiling was performed using Affymetrix HTA2.0 arrays. The tumor samples were then subtyped into eight different groups based on oncogenic signaling pathways. The histopathological features of the samples, intraoperative details were collected along with follow up data for a period of 1 year. Correlation between tumor subtypes and clinical outcomes/survival patterns was analyzed.

Results: On analysis of these 21 oncogenic signalling pathways, the gastric cancer from 52 gastrectomy samples in Madurai cohort could be subdivided into eight different subtypes. The mortality (V-0.85% & VII -0.88%) and rate of metastasis (0.9% & 0.77%) has been high in genomic subtypes V and VII (p value <0.001 and 0.002 respectively). The local infiltration rate observed intraoperatively was high for the genomic subtype II (0.72%) (p value – 0.002).

Conclusion: Gastric tumor samples in South Indian cohort have been categorised into 8 subtypes based on oncogenic signalling pathways of which genomic subtype II has high local infiltration and genomic subtypes V and VII have exhibit high levels of metastasis and less survival.

PSY 002

Small scale cervix screening programs -generating local evidence

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Abstract: As the global call for action to eliminate cervical cancer is picking up, it becomes imperative to generate local evidence within the existing resources.The study presents a single-centre experience of a small-scale HPV-based cervical cancer screening program and the results with various sampling procedures and a comparison of a PCR-based and Hybrid capture platforms.

Aim: To compare the screening outcomes in physician collected samples of HPV DNA

Methods: Cervical samples from Chennai metropolitan area were collected from women aged 30 -59 years. Based on the availability of resources the samples were randomly allocated to either run on a cobas 4800 or a hybrid capture 2 platform. Further evaluation and management was done on cytology triaging of HPV positive women with ASCUS+

Results: Between June 2022 to December 2023 2746 cervical samples were collected, 1546 samples analysed using Cobas 4800 and 1200 samples were analysed using hybrid capture-2 method. The HR-HPV positivity rate was 9.4 and 8.5% positive rates. The reflex testing in the Cobas allowed for cytological analysis of all HPV positive samples while the cytology results were available only in 98% of HC-2 samples. The CIN 2+ detection rates stood at 3.8 and 3.3 per 1000 women screened respectively. There were 6 ASCUS + among 96 HPV positives other than 16 & 18.

Conclusion: Triaging and linkage to treatment is a challenge in implementing primary HPV screening programs. However good design and documentation of small-scale programs generate local evidence and can aid in formulating good screening practices.

PSY 003

Relevance of Comprehensive Geriatric Assessment among Elder patients with Cancer

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Abstract: The Elderly cancer population has been progressively increasing due to the heightened life expectancy and lowered mortality rate, throughout the world including India. The Comprehensive Geriatric Assessment (CGA) is a multi-dimensional set of tools which gives the treating physician a quick understanding of the patients' health status and aids in personalizing treatment plans accordingly. Further, it can help identify issues and suggest earlier interventions to effectively deal and manage the symptoms amongst the elderly. In our study, the patient's demographic profile, medical history (comorbidities), type of cancer, risk for chemo toxicity, fall risk assessment, IADL, ADL, frailty, nutrition, physical and psychological status were collected as a part of our CGA. Tools have been chosen and compiled based on the American Society of Clinical Oncology (ASCO) guidelines and adapted for the Indian population. The sample population consists of patients with cancers of the breast (22.2%), Renal cell carcinoma (22.2%), Lymphoma (22.2%), Stomach (11.1%), Ovarian (22.2%) and Lung (11.1%); having a mean of 12.1 on the Geriatric-8 tool. All of the patients are dependent on their family for care. Our approach of the CGA has been proven to be effective, from our interim descriptive study with a sample population of 30 patients, in helping physicians in developing a personalized treatment plan for the patients. Despite initial hesitance, patients cooperated and the average time taken for completing the CGA was 15 minutes. The results of our study have shown the effectiveness of integrating CGA and it is crucial to integrate this approach in every geriatric oncology health care setting to ensure the quality of life of the patient.

PSY 004

Cancer screening and diagnostic care cascade - A community health worker led population based cancer education cum screening strategy a resource constraint setting of North East India

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Background: The coverage of screening for common cancers (oral, breast and cervix) remains very low despite the implementation of nation-wide screening non-communicable diseases in India in 2016. A tertiary cancer centre from the northeastern region implemented an Accredited Social Health Activist (ASHA)-led home-based cancer education and screening program in Assam, a north-east state of India.

Objectives: To assess the cancer screening and diagnosis care cascade (oral, breast and cervical cancers) among the population who were provided education on cancer by ASHA.

Methods: In this cohort study, the trained ASHA workers delivered the cancer education during household visits and screened all people aged ≥30 years for cancer-related symptoms (oral, cervix, breast and other cancers) using a modified community-based assessment checklist. The symptom-positive individuals were referred to the sub-centre where detailed screening for cancer was carried out. The cancer-suspected individuals were referred to the tertiary care cancer centre for diagnosis confirmation and treatment.

Results: A total of 48,233 individuals participated were provided the screened for presence of cancer-related symptoms. Of them, 51.7% were female and 69.0% were aged <50 years. At least one cancer-related symptom was found in 9.3% individuals (male-7.0% and female-11.2%). The oral, cervix, breast and other cancer site-related symptoms were observed in 5.8%, 3.5%, 0.6% and 2.0%, respectively. Referral compliance to sub-centers and tertiary care centers was 78.1% and 62%, respectively. The median days taken between symptom screening and diagnosis, detailed cancer screening at subcentre and diagnosis, and between diagnosis and treatment initiation were oral cavity (n-22), pharynx (n-11) and esophagus (n-10). Cervical and Breast cancer were observed in eight and five females, respectively.

Conclusion: This study demonstrated the cancer screening and diagnosed care cascade of ASHA-led home-based cancer education cum screening program in resource constraint setting. The loss to follow up at each level of care cascade must be tracked and systematically for early diagnosis and management.

PSY 005

A qualitative exploration of challenges, disabilities and psychosocial struggles of facially disfigured cancer patients-Adaptation and Rehabilitation Perspective

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Background: Facial disfigurement resulting from surgical procedures and chemotherapy significantly impacts the self-perception of Head and Neck cancer patients throughout the journey of their oncological treatment and in their daily lives.

Objective: The present study intends to explore the challenges, disabilities and psychosocial struggles of disfigurement in Head and Neck cancer patients subjected to oncological treatment. The main aim of the study is to examine the survival struggles and fatalistic experiences of defacement of the patient undergoing treatment.

Methodology: Taking an interpretive phenomenological approach this study interviewed 38 facial disfigured Head and Neck cancer patients recruited from the clinical settings of oncology hospitals in Tamil Nadu. Data collection included in-depth interviews, demographic questionnaires and field notes.

Results: Obtained data were content analysed and the emergent themes included the voluntary choice of self-isolation, feeling of guilt, insufficient rehabilitation, unacceptance and negligence within families, poor support system, difficulty in alteration and transformation, voluntary camouflage and strain in social interaction.

Conclusion and Key Takeaway: The study sheds light on the pressing need for comprehensive rehabilitation interventions and the formulation of effective policy recommendations. These measures are essential to bolster the economic and social well-being of survivors who have experienced significant challenges.

PSY 006

Crystal Clear or Frosty? Unravelling Frozen Section's validity in Solid tumours initial Diagnosis in a low resource setting in Northeast India

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Background: In low-resource settings, timely and accurate diagnosis of solid tumors is crucial for effective treatment and improved patient outcomes. Routine histopathological examination (HPE) often entails delays, posing challenges for patients who can't afford multiple visits to the hospital, add financial burden and increase distress to patient and their families. Frozen section diagnosis offers a potential solution by providing rapid results, but its validity in such settings for initial diagnosis needs evaluation.

Objectives: The operational research aimed to assess the validity of frozen section as compared to routine histopathological examination of solid tumors in such a low-resource tertiary cancer centre in Assam, India.

Methods: A cross-sectional study design was employed. Secondary data between 2014 and 2022 involving 1,035 cases was extracted form hospital records and analysed.

Results: The primary cancer sites varied, with head and neck being the most common. Overall, Positive predictive value (PPV) is 95.5% and Negative predictive value is 55.6%. Across all examined categories, four groups, namely head and neck, colorectal, upper gastrointestinal, and female reproductive systems; PPV ranged from 90.2% to 97.1%, and NPV from 48.1% to 58.0%.

Conclusion: The findings of this study support the validity and utility of frozen section diagnosis for large proportion of patients with solid tumors in low-resource settings.

PSY 007

Role and Satisfaction in Cancer Treatment Decisions Among Patients and Caregivers.

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Background: Cancer treatment decision-making is a complex process involving patients, caregivers, and healthcare professionals. Understanding the roles and satisfaction levels of patients and caregivers in these decisions is crucial for improving treatment outcomes and patient well-being.

Objectives: This study explores the decision-making roles, and satisfaction with treatment decisions among cancer patients and their caregivers.

Methods: A cross-sectional study was conducted at the GVN Cancer Institute, Trichy, TamilNadu, involving 160 cancer patients and their caregivers. Data was collected on demographic characteristics, decision-making roles and satisfaction with treatment decisions, using a questionnaire.

Results: The average age of the patients and caregivers was 56.96 years and 44.31 years, respectively. Among the patients, 73.8% were female, 69.4% were unemployed, and 43.1% had a monthly family income between Rs 7,316-21,913. Primary caregivers were often children (41.3%) or spouses (44.4%), and caregivers were predominantly married (84.4%) and educated up to a graduate level (31.9%). Decision-making in treatment was a collaborative effort for many patients, with 52% involving their children, 40.7% involving their spouses, and 46.3% making decisions independently. A notable 51.3% of patients felt extremely involved in the decision-making process. Satisfaction with treatment decisions was high, with 51.3% very satisfied and 50.6% confident in the decisions made. Caregivers played a significant role in treatment decisions, with 41.9% acting as shared decision-makers alongside patients and doctors. 90.6% felt adequately informed about the available treatment options, with 67.5% rating the clarity of information provided by healthcare professionals as very clear.

Conclusion: In our study high levels of involvement and satisfaction were reported, emphasizing the importance of clear communication and adequate information from healthcare providers. The involvement of relatives shows the value of a strong social support system in enhancing treatment satisfaction and outcomes.

PSY 008

A metagenomics investigation to gain insights into the pattern of microbial dysbiosis in gastric cancer and gastritis: a Multi-Center study in India

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Background: Gastric cancer (GC) is a major health problem in India, ranking among the top six cancers. Established risk factors for GC include *H. pylori* infection, nitroso compounds, smoked food and alcohol consumption, Epstein-Barr virus (EBV) infection, gastroesophageal reflux, and Barrett's oesophagus. Recent studies have also highlighted gut microbial dysbiosis as a crucial factor in GC development. This study aims to identify specific bacteria, other than *H. pylori*, that may influence the disease process in gastric cancer.

Methods: The study was conducted at six centers across India: JIPMER Puducherry, AIIMS Bhubaneswar, AIIMS Rishikesh, TMH Mumbai, NEIGRIHMS, and Mizoram State Cancer Institute. Inclusion criteria such as (A) patients aged 18 to 70 years, (B) scheduled for upper gastrointestinal endoscopy, (C) suspected of having gastric cancer or chronic superficial gastritis, and (D) residing in the respective regions for over 15 years were considered for the study. A total of 264 tissue biopsy samples were collected from patients undergoing diagnostic endoscopy for suspected ulcers or cancer. Biopsy samples were taken from normal and abnormal sites and sent for routine histopathological studies and shotgun sequencing. The sequencing process involved adapter trimming (fastp), quality assessment (FastQC), taxonomy distribution analysis (Kraken2), identification of operational taxonomic units (OTUs), and generation of abundance charts. Alpha and Beta Diversity analyses were performed to investigate microbial population diversity, followed by evaluations of microbial dysbiosis among GC and gastritis patients and investigation of tumor microbial dysbiosis in GC.

Results: The study revealed that the bacterial load in GC patients is significantly higher, showing up to five times more bacteria compared to gastritis patients. Abundance analysis identified a higher population of specific bacteria such as *Prevotella melaninogenica*, *Parvimonas micra, Treponema denticola, Helicobacter pylori*, and *Lactobacillus amylovorus* at GC abnormal sites. Principal Component Analysis (PCA) indicated distinct differences in bacterial population distribution between gastritis and GC cases. Further differential abundance analysis showed that *Lactobacillus johnsonii* and *Lactobacillus gasseri* species were enriched up to nine-fold in GC patients, while *Edwardsiella* species were depleted two-fold compared to gastritis patients. Similarly, in the tumor dysbiosis analysis, *Streptococcus constellatus* and *Ligilactobacillus agilis* were found to be enriched, and *Edwardsiella* was depleted in cancer abnormal sites compared to cancer normal sites.

Conclusion: The study revealed distinct microbial dysbiosis patterns between GC and gastritis cases. GC samples exhibited a more diverse microbial population compared to gastritis.

IMMUNOTHERAPY

IMM 01

Nivolumab in advanced hepatocellular cancer: Usage pattern in real world; can low dose be an option when access is limited?

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Background: Atezolizumab with bevacizumab is the standard 1st line treatment for advanced hepatocellular carcinoma (HCC). However, low Middle-Income country (LMIC) like India, immune checkpoint inhibitors (ICI) like nivolumab, at currently licensed doses remain unaffordable. This study was designed to look at the outcomes of low dose nivolumab in Indian patients with advanced HCC.

Methods: We retrospectively reviewed data of patients with advanced HCC, diagnosed and treated at CMC, Vellore between Aug 2018 to Aug 2023. Patients who received more than 1 doses of nivolumab were included in the study. Our primary endpoint was progression free survival (PFS) and secondary endpoint was overall survival (OS).

Results: 99 patients received low dose nivolumab with a mean age of 52.7 years, male (88%), ECOG 1(83%), BCLC C (81%). The median dose of Nivolumab/kg/2-weeks was 0.49mg (IQR-0.40-0.61). Median PFS was 42 weeks (95% CI 30.64-53.36).The median OS was 73.86 weeks (95% CI: 50.77-96.92). Median PFS for patients who were CTP A , B and C was 54.0 weeks (95% CI: 37.72- 70.28), 30.71 weeks (95% CI: 13.97-47.45) and 8.0 weeks (95% CI: 0-37.36). Adverse events occurred in 14(28%) of patients, the commonest being hypothyroidism 10(20%).

Conclusion: Low dose nivolumab is active in patients with advanced HCC. Outcomes are improved as compared to historic cohort of first line TKI alone in this disease.

IMM 02

Real-world experience with immunotherapy in metastatic Gastric & GE junction cancers

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Introduction: Introduction of immunotherapy(IO) in metastatic G/GE junction(mG/GE) cancer improves PFS and OS as per internation trial data.

Objective: To analyse outcomes with IO in mG/GE Adenocarcinoma.

Method: An analysis of all mG/GE Adenocarcinoma patients who received nivolumab/pembrolizumab in any line between January2019 and June2023 was done. End points were PFS, OS and safety.

Results: 39 patients received IO (nivolumab 79.5%, pembrolizumab 20.5) with majority males(30,76.9%) and median age of 68 years. Molecular profile showed 20.5%(n=8) were MMR deficient(dMMR), 51.3%(n=20) PDL1 positive and 2 Her2neu positive. 64.1%(n=25) received IO in 1st line and in later lines in the rest(±chemotherapy). Average IO doses were 10. At a median follow-up of 18 months, PFS was 12(95% CI 2.6-21.4) and OS 17 months(95% CI 5.4-28.5). In dMMR patients(n=8), median PFS and OS was not reached, with PFS and OS rates at 24 months being 56% and 62% respectively. MMR proficient(n=31) population showed PFS of 12 (95%CI 2.6–21.4) and OS of 17 months(95% CI 0.1–35.1). PDL1+ve patients(n=20) showed a PFS of 12 months (95%CI 14.1-19.8) with OS not reached. Most common adverse effects were hypothyroidism, fatigue and skin toxicity; with 3 patients having grade 3 side effects(pneumonitis and hepatitis).

Discussion: Our experience with IO is similar to clinical trial data and better than historical datasets. Remarkable survivals in dMMR subgroup emphasizes importance of looking for MMR deficiency. PDL1 positive subgroup fared better than PDL1 negative, highlighting its importance. Better biomarker selection is essential for maximum benefit with immunotherapy in G/GE cancers.

IMM 03

Limited duration of treatment with immunotherapy in complete responders in metastatic renal cell carcinoma - A real world single center experience.

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Introduction: Immunotherapy has rapidly altered the landscape of treatment of metastatic renal cell carcinoma (mRCC), resulting in significant improvements in outcomes. Studies have shown that those with complete response tend to have prolonged duration of response. However there is data lacking particularly in the Indian setting with regard to the duration of treatment in those who achieve a complete response.

Objectives: This study was performed to evaluate the duration of response and survival after stopping treatment with immunotherapy in those who achieve complete response.

Methods: A retrospective study was carried in patients of mRCC who received immunotherapy between April 2016- April 2023 and followed up till Feb 2024. Response was assessed using RECIST criteria. Duration of treatment and survival analysis was carried out for those who achieved CR.

Results: 72 patients received immunotherapy during the study period. The complete response (CR) was seen in 11(15%) patients. The median duration of treatment received before stoppage by those in CR in mRCC was 14 months. Median number of cycles received was 18cycles. All of them continue to be in remission with 5 out of the 11 patients crossing 6 years of survival with a maximum ongoing survival of 90 months being noted.

Conclusion: Long lasting response and survival was seen with immunotherapy even after stopping treatment in those who achieve CR. Randomised studies need to be undertaken to evaluate the possibility of shorter finite duration. This would help in reducing financial burden, particularly in developing countries.

IMM 04

Real-world outcomes post Induction Chemotherapy with or without low-dose Nivolumab for Stage III Non-Small cell Lung Cancer ineligible for upfront local therapy – A Propensity Score Matched Retrospective Analysis

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Background: The benefit of adding low-dose nivolumab to induction chemotherapy in Stage III NSCLC, not amenable to upfront local therapy, has not been reported.

Methods: 82 patients with Stage III non-oncogene-driven NSCLC, deemed ineligible for upfront local therapy in MDT, were divided equally into NACT-alone and NACT with low-dose nivolumab (NACT +I/O) groups after propensity score matching. The primary endpoint was objective response rates (ORR), and the secondary endpoints were feasibility of sequential local therapy, median PFS, and median OS.

Results: ORR was 73.1% vs. 39% (p=0.002), and sequential local therapy rates were 66% vs. 46% (p=0.075) in the NACT-I/O vs. NACT group, respectively. After a median follow-up of 13.5 months, median PFS was not reached (NR) vs. 11 months (p=0.0014), and median OS was NR vs. 28 months (p=0.22), favoring the NACT-I/O group. Subset analysis showed that sequential local therapy had improved PFS in both groups.

Conclusion: Adding low-dose nivolumab to NACT had better response rates, increased chances of curative therapy, better PFS, and numerically higher OS.

IMM 05

Real world experience with pembrolizumab for triplenegative breast cancer from an Indian tertiary care center.

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Background: Neoadjuvant chemotherapy with addition of pembrolizumab in stage IIand III triple negative breast cancer is new standard of care.

Methods: This study included the patients who were diagnosed with TNBC and were started on NACT along with Pembrolizumab to evaluate response and toxicity.

Results: A total of 19 patients with TNBC were included in the study, 11 of them received paclitaxel and carboplatin followed by Epirubicin and Cyclophosphamide with Pembrolizumab regimen and one patient is on Docetaxel, Carboplatin and Pembrolizumab. The median age of the cohort was 49.5 years (range 24-71 years)

Conclusion: The rate of pCR with Pembrolizumab and NACT is promising but the toxicity profile among the Indian patients is different in comparison to Keynote 522 study population. This study aims to continue the accrual to evaluate the efficacy and the toxicity ofthe combination regimen in Indian population.

IMM 06

Low dose Nivolumab with TKI in mRCC: dosing strategies, de-escalation and survival among self-paying patients in India.

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Background: Nivolumab with TKI is an accepted treatment option for metastatic RCC (mRCC).However, nivolumab at currently licensed doses remains unaffordable in India where most patients pay out-of-pocket. We evaluated the practice patterns and clinical outcomes with low dose nivolumab combined with TKI in a tertiary academic hospital in India.

Methods: Consecutive mRCC patients treated with nivolumab and TKIs between December 2019 and December 2022 were included. Due to variations in nivolumab dosing frequencies, we used dose/Kg/14 days for comparative analysis. The survival impact of treatment de-escalation due to financial or drug toxicity was evaluated. PFS, OS were calculated as per standard definitions and adverse events graded as per CTCAE 4.1.

Results: We identified 57 patients who received nivolumab and TKI with 38(63.2%) IMDC intermediate and 15 (26.4%) poor prognoses. The mean age was 53.1±8 years, male (82%), Non-clear cell histology in 16(28%). Common metastatic sites were osseous (43.9%), pulmonary (73.7%), CNS 8(10.2%) and Liver15 (26.3%). Forty- six (80.7%) received no prior systemic therapy. The median Nivolumab dose was 0.88 mg/kg/14days (IQR0.4-1.4), commonly dosed as 40mg every 21-28 days. The TKIs used were lenvatinib (47.4%), cabozantinib (49.1%). At 12 months median follow- up, the PFS of 31 patients who received <1mg/kg/14days (ULD) of Nivolumab was 11 months versus 23 months among the 25 patients receiving >1mg/kg/14days (LD) (p=0.39). The median OS was NR vs 25 months (P=0.51). The one-year PFS and OS was 35.5% vs 42.3% and 45.2% vs 53.8% for ULD vs LD respectively. Most (68.4%) underwent treatment de-escalation due to financial toxicity 28(43.9%) or drug toxicity 11(19.3%) without any detriment to PFS or OS (1year PFS and OS with and without de-escalation was 46% vs 22.2% and 56.4% vs 33.3% respectively). Grade 3&4 adverse events were palmoplantar dysesthesia 10(17.5%), hypertension 8(14%). Primary hypothyroidism 28(52.8%) was the commonest grade 2 AE.

Conclusions: LD nivolumab with TKI did not result in inferior survival although the efficacy of ULD could not be confirmed. Treatment de-escalation due to financial toxicity was common. LD strategies in mRCC warrant prospective trial evaluation.

IMM 07

Low-Dose Nivolumab with Induction Chemotherapy for Inoperable HNSCC in 111 patients: Response rates, Survival, and Implications for LMICs.

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Background: Immune checkpoint inhibitors (ICI) have proven efficacy in R/M HNSCC. In LMICs, <5% of patients have access to ICI at approved doses. We assessed the efficacy of low dose ICI in locally advanced/inoperable HNSCC.

Methods: We conducted retrospective analysis of patients with locally advanced/inoperable HNSCC who underwent induction chemotherapy with low dose nivolumab. Eligible doses of nivolumab were <3mg/kg q2w with chemotherapy backbone of TPX or TP+/- OMCT. The principal outcomes were conversion to radical therapy, ORR, PFS and OS.

Results: We included 111 patients, 78.4% males with median age 48. Primary sites- oral cavity(71.2%), hypopharynx(11.7%), oropharynx(9%) and larynx(8.1%) mainly stage IVA/IVB. TPX/TP was used in 95.4%. Nivolumab 20/40/100 mg every 2/3/4 weeks were the doses and intervals. The harmonized median dose of nivolumab was 0.51 mg/kg q2w(median 3 doses). Response assessment was possible for 92 of 111 patients using RECIST 1.1 which showed CR in 7 (6.3%), PR in 65(58.6%), SD in 12(10.8%), PD in 8(7.2%). ORR was 78.2% in those assessed. 25(31.6%) oral cavity tumours became resectable following induction, of whom, 8(32%) had pCR. 60% of oropharyngeal, 69% of hypopharynx and 77.8% of larynx primary site underwent radical RT/CRT after induction. Median PFS has not been reached at the current median follow up of 10 months. PFS and OS at 1 year were 67.3% and 82.6%. Median PFS has not been reached in the cohort with pCR/rCR and 18 months in the group without (p 0.07). No recurrence/death has been observed thus far in those with pCR. At nivolumab doses <0.6mg/kg, median PFS was significantly lower(13 months vs NR; p 0.037). The retrospective design introduces potential confounders. Grade 3/4 AEs were neutropenia(14.4%), CINV(2.7%), anemia(2.7%), mucositis(1.8%) and febrile neutropenia(1%); Any grade hyponatremia(14%), hypothyroidism(5%).

Conclusions: Low-dose ICI with induction chemotherapy demonstrated promising ORR and conversion to radical therapy. Survival, although immature, appears favourable, especially for patients with pCR/rCR. Doses of nivolumab < 0.6mg/kg may compromise survival. Low-dose (1/6th of standard dose) regimens could enhance ICI access in LMICs due to significantly reduced costs and merit investigation in randomised trials to confirm our findings.

IMM 08

Prevalence and Implications of Germline BRCA Mutations in HER2-Negative Breast Cancer: A Prospective Real-World Evidence from a Tertiary Hospital in Eastern India

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Background: Breast cancer (BC) is significantly influenced by hereditary factors, with germline BRCA mutations (gBRCA1/2mut) being the main driver. Her2 negative subtype represents a substantial portion of cases and poses therapeutic challenges.

Methods: This prospective observational study was conducted from May 2022 to May 2024. We included triple-negative (TNBC) or ER/PR+ HER2-negative BC patients to determine the prevalence of gBRCAmut and its correlation with demographic factors and therapeutic implications

Results: Over two years, 201 patients were accrued with a median age of 49 years (25-79). The majority had locally advanced/ metastatic disease (stage III –35.3%, stage IV – 27.8%). TNBC constituted 50.2% (101/201), and ER+ HER2 Negative BC accounted for 49.8% (100/201). The prevalence of gBRCAmut was 10.45% (21/201). Variants of uncertain significance were identified in ≈3% (6/201). gBRCAmut associated with patients aged ≥40 years (19/21) alongside early-stage BC (11/21). A family history of cancer was evident in 33.3% (7/21). gBRCA1mut was more common (66.6%) than gBRCA2mut (33.3%). gBRCA1mut was equally distributed among both subtypes, but gBRCA2mut was observed more with TNBC (4/7). 13/21 gBRCAmut patients were eligible for Olaparib (8 in adjuvant, 5 in metastatic disease), yet only one patient opted for it. 4/21 patients chose to undergo risk-reducing mastectomy (RRM) and salpingo-ophorectomy (RRSO).

Conclusion: In Her2-negative BC, the regional prevalence of gBRCA mutations is 10.45% (BRCA1>BRCA2). gBRCAmut correlated with early-stage BC and age ≥40. Four patients were able to undergo RRM and RRSO, while just one patient could access Olaparib, underscoring the real-world financial challenges. The study's single-center nature is a limiting factor.

SOLID TUMORS- 3

SOL-03 001

Efficacy and safety of trastuzumab emtansine (T-DM1) biosilmilar in the treatment of HER2-positive metastatic breast cancer – A real world study

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Background: This real-world study aimed to evaluate the efficacy and safety of T-DM1 biosimilar in HER-2 positive metastatic breast cancer.

Methods: A retrospective analysis of patients with HER2-positive mBC receiving T-DM1 from 6 comprehensive cancer centres between July 2021 to December 2023 were include in this analysis. We evaluated the outcomes (RR, PFS) and safety.

Results: The analysis included 72 patients, with a median age of 58 (range 27-77) years. 44 patients (61.1%) were ER/ PR +ve. De-novo metastasis was found in 79% of cases. Metastatic sites were lungs in 34.7%, brain in 36.1 %, liver in 31.9 %, and bones in 44.4%. All patients had received trastuzumab in the prior treatment. 3 patients received Pertuzumab along with trastuzumab. The median number of T-DM1 cycles administered was 11. The overall response rate was 44.4% (9.7% CR and 34.7% PR), with 12.5% of patients having stable disease. Grade 3/4 toxicities were observed in 9 cases - thrombocytopenia (n = 6, 8.3 %), neutropenia (n = 1, 1.38%), and transaminitis (n = 3, 4.2%). Dose interruptions were observed in eight patients due to grade 3 or 4 toxicity. The median PFS was 12 months (survival rate, 44 ± 7.3%). 15 patients had PFS greater than 12 months, and 7 patients had PFS greater than 2 years.

Conclusion: The real-world practice of T-DM1 biosimilars has demonstrated similar findings in terms of effectiveness and toxicity profiles as reported previously, however thrombocytopenia was more common in our population.

SOL-03 002

Adjuvant Trastuzumab for 6 months vs 12 months in Non-metastatic breast cancer – An analysis of Overall Survival (OS) & Disease free survival (DFS) at 2 years follow up at a South Indian Regional Cancer Centre

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Background: Breast cancer is a systematic disease with disease biology being an important prognostic variable - Luminal A fare better than HER2 positive or Triple negative disease. Availability of targeted agents for HER2 has improved outcomes in such patients.

Objectives: De-escalation of 12 months to 6 months of adjuvant Trastuzumab has given mixed results. This retrospective study compares OS vs DFS at 2 years follow up after completion of Trastuzumab therapy.

Methods : Patients were stratified upon total duration of Trastuzumab therapy [>6 months to 12 months(ie 10 to 17 doses) as arm A vs upto 6 months(ie upto 9 doses) as arm B]. Follow-up records were used for OS & DFS calculation.

Results: Final analysis included a total of 100 patients (81 patients in arm A and 19 patients in arm B). Patients in stage I, II and III were 6%, 46% and 48% respectively. Overall OS at 2 years was 93% (Arm A 93.82% & Arm B 89.47%) and DFS at 2 years was 82% (Arm A 82.71% & Arm B 78.95%).

Conclusion: Both arms are comparable and duration of adjuvant Trastuzumab alone doesn't determine the course of the disease. Various factors as disease stage, patient age and others play a role in patient survival.

SOL-03 003

Efficacy and toxicity profile of fixed dose capecitabine in metastatic breast cancer: the x-7/7trial

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Background: In metastatic breast cancer (MBC), the FDA-approved dose of oral capecitabine is 1250 mg/m² twice daily for 14 days on, followed by 7 days off. This regimen is associated with a median progression-free survival (PFS) of 4-5 months, but it also suffers from poor tolerance and high discontinuation rates (16To evaluate this hypothesis, we conducted an observational interventional single-arm study from April 2023 to April 2024. The study aimed to assess the efficacy and tolerability of a fixed dose of capecitabine, administered at 1500 mg twice daily for 7 days on, followed by 7 days off (FD), in comparison to the FDA-approved dose and schedule (SD).

Methods: Females with metastatic breast cancer (MBC) and any prior lines of endocrine therapy or chemotherapy were included in the study. HER-2 positive patients were permitted to participate with concurrent trastuzumab treatment. Patients were stratified based on the line of chemotherapy (first or subsequent), measurable disease, and ER status, and commenced on a fixed dose of capecitabine at 1500 mg twice daily. The primary endpoint was 3-month progression-free survival (PFS). Capecitabine-related toxicities were actively solicited and graded at each visit, utilizing the CTCAE 5 criteria. Toxicities were meticulously assessed at regular intervals using both clinical and radiological methods, specifically FDG PET CT, at 3, 6, 9, and 12 months.

Results: Between April 2023 and April 2024, a total of 36 patients were enrolled in the study. Of these, 50% (18) were hormone receptor-positive/HER-2 negative, 13.8% (5) were HER-2 positive, and 36% (13) were triple negative. Nine patients (25%) had received one line of chemotherapy, while 27 patients (75%) had received two or more lines of chemotherapy. Remarkably, 32 patients (88.8%) achieved the primary endpoint of 3-month progression-free survival (PFS) with fixed-dose capecitabine. None of the patients discontinued treatment due to toxicity, nor did any require dose reductions. Hand-foot syndrome (HFS) was the most frequent toxicity, observed as grade 2 in 2 patients (5.5%) and grade 1 in 10 patients (27.7%). No cases of mucositis were reported. Additionally, 4 patients (11%) experienced grade 1 diarrhea. As of the latest follow-up, 30 out of the 36 patients continue to receive fixed-dose capecitabine.

Conclusion: Fixed-dose capecitabine (1500 mg orally twice daily) administered on a 7-day on, 7-day off schedule is associated with promising progression-free survival (PFS), minimal toxicity, improved quality of life, and a notably low rate of dose reductions and therapy discontinuations.

SOL-03 004

Comparing the Efficacy and Toxicities of Hypofractionated vs Ultra-Hypofractionated Adjuvant Radiotherapy in Breast Cancer Patients : A Retrospective Single-Center Experience

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Background: Conventional radiation therapy was the standard of care for Adjuvant treatment in Breast cancer patients. Radiobiological studies demonstrated that higher dose per fraction can have significant local control rates as Breast is a late reacting tissue. Hence Hypofractionated radiotherapy (HFRT) was found to be an effective treatment modality for early-stage Breast cancer. Recent evidence suggests that Ultra-Hypofractionation (U-HFRT) also offers comparable outcomes with reduced toxicity. We are retrospectively analysing the two subsets treated at our institute.

Objectives: To compare the toxicities and efficacy of hypofractionated versus ultra-hypofractionated adjuvant radiation therapy in breast cancer patients.

Methods: 60 breast cancer patients treated at our institute were retrospectively analyzed. 30 patients who received HFRT 40Gy/15 fractions and 30 patients who received U-HFRT 26Gy/5 fractions were included. Additional boost of 10Gy in 4 to 5 fractions was given for post Breast conversation surgery patients in both the groups. Acute toxicities, late normal tissue effects, disease-free survival (DFS) and overall survival (OS) were compared.

Results: The HFRT group had significantly higher grade 1 skin toxicity at 3 months ($p=0.010$) and grade 1 esophagitis during radiotherapy ($p=0.010$) compared to the U-HFRT group. No significant differences were observed in late normal tissue effects at 2 years, OS and DFS between the groups.

Conclusion U-HFRT demonstrated comparable outcomes to HFRT in terms of late normal tissue effects, OS and DFS. However, HFRT was associated with higher acute skin toxicity at 3 months and esophagitis during treatment. U-HFRT may be a safe and effective option for breast cancer patients, offering similar efficacy, logistic feasibility with reduced early toxicity.

SOL-03 005

Neoadjuvant fixed dose subcutaneous combination of Trastuzumab + Pertuzumab with chemotherapy in operable and locally advanced breast cancer- Real world data from single centre experience from Bangalore, India with chemotherapy in operable and locally advanced breast cancer- Real world data from single centre experience from Bangalore, India

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Background: Dual targeted therapy with chemotherapy is the standard of care in Her2 positive early and locally advanced breast cancer. Fixed dose formulation of Trastuzumab and Pertuzumab(HP) by subcutaneous(sc) route in FeDeriCa study was found to have non inferior cycle 7 serum Pertuzumab trough levels as well as pathological complete response(pCR) rates (60%) as compared to intravenous route. This convenient regimen was used in a real world setting in a single centre (ASTER CMI Hospital) in Bangalore, India to evaluate ease of administration and pathological response rates.

Objectives: This observational single arm prospective ongoing study aims to evaluate response rates, acceptability, ease of administration and cost analysis of fixed dose combination (sc-HP) with neoadjuvant chemotherapy in operable and locally advanced Her2 positive breast cancer.

Methods: Neoadjuvant chemotherapy with HP (sc)- loading dose of 1200mg Pertuzumab + 600mg Trastuzumab sc followed by 600mg/600mg HP 3 weekly was initiated in 22 patients from February 2023 to till date, of which 16 patients have completed planned neoadjuvant treatment and have undergone surgery.

Results: The median age is 55 years (range 38-72). Most patients (81.25%) have an ECOG performance status of 1, and the majority (81.25%) presented at clinical stage III. Invasive Ductal Carcinoma is the predominant histological subtype (93.75%). Regarding hormone receptor status, 75% are estrogen or progesterone receptor positive. Chemotherapy regimens used include TCHP (81.25%), PCHP (6.25%), TCH followed by TCHP (6.25%), and EC + Paclitaxel + HP (6.25%). A pathological complete response was observed in 62.5% of the patients.

Conclusions: We report equivalent (62.5%) pCR rates as observed in FeDeriCa Study. With ongoing recruitment, this is one of the first studies from India evaluating the efficacy and cost analysis of this convenient regimen. Ease of administration and division of workload favoured subcutaneous administration.

SOL-03 006

Pathologic Complete Response Achieved in HER2-Positive Breast Cancer After Neoadjuvant Therapy With TCH vs. TCHP and Other Clinicopathological Predictors of Pathologic Complete Response in Patients Undergoing Dual anti-HER2 Treatment: A Prospective Analysis Using real-world Data

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Background: A pathologic complete response (pCR) is defined as "the absence of invasive disease in the breast and axilla", meaning "ypT0/is, ypN0". Neoadjuvant regimens containing single or dual HER2/neu blockade and chemotherapy were widely used. The average pCR in various studies in HER2/neu positive breast cancers was around 50%.

Objectives: We hypothesize that multiple clinicopathological features along with single vs dual HER2/neu blockade correlate with treatment response following neoadjuvant chemotherapy. The achievement of pCR is the primary endpoint.

Methods: HER2/neu positive breast cancer patients who were planned for neoadjuvant treatment with Anti HER2/neu targeted therapy combined with chemotherapy were selected. The response variable was whether or not a complete pathologic response was achieved at surgery after combined neoadjuvant therapy. Variables including Hormone receptor status, Stage at diagnosis, Axillary nodal status, and Ki 67 index were analyzed.

Results: Seventy five HER2/neu positive women received neoadjuvant therapy during the period June 2022 to Jan 2024. In our study, 57% of all patients achieved complete pathologic response. The pCR rate achieved with dual Anti HER2/neu Blockade is 64.52% vs 45.55% with single HER2/neu blockade. In the group of HR-negative patients, 83% achieved pCR.

Conclusion: The pCR rates with Anti HER2/neu Blockade are comparable to what has been described internationally. The pCR rates with dual Anti HER2/neu Blockade are high when compared with single Anti HER2/neu Blockade. The absence of hormonal receptor expression is a strong predictor of pCR.

POSTER PRESENTATION ABSTRACTS

Solid Tumors

SOL 001

Real-world pattern of treatment and clinical outcomes of EGFR-mutant non-small cell lung cancer (NSCLC) – A single institution experience

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Background: Limited real-world data exist on EGFR TKI treatment patterns and outcomes, as first-line therapy for EGFR-mutated NSCLC.

Objective: To assess treatment patterns and outcomes (Progression-free survival (PFS), response rate, and overall survival (OS)) among EGFR-mutated NSCLC patients at Amrita Institute of Medical Sciences, Kochi.

Methods: This retrospective study was conducted from September 2011 to April 2023. 991 NSCLC patients with adenocarcinoma or adenosquamous carcinoma were tested for EGFR mutations.

Results: of the 991 NSCLC patients tested for EGFR mutations, 260 (26.24%) were found to be positive. Median age was 58 years (range 29-88 yrs), with equal male-to-female ratio. Exon 19 deletion (52.69%) was the commonest mutation followed by exon 21 (L858R) (20.3%), exon 20 insertions 7.3%, exon 18 (G719X) in 5% and exon 20 (T790M) in 3.84%. EGFR mutation frequency was 17.24% in males, 54.9% in females. Among 260 patients receiving first line EGFR TKI treatment, 84.61% received gefitinib, 9.61% received osimertinib, 3.84% received erlotinib and 1.92% received afatinib. With gefitinib CR was seen in 4.54%, PR in 40.45%. 23.2% had SD and 21.36% had PD. Median PFS was 10months. 0.38% of patients had grade 3 toxicities (Grade 3 diarrhoea). 46.54% received 2nd line treatment after progression.

Conclusion: This study provides real-world insights into EGFR TKI treatment outcomes for EGFR-mutated NSCLC, paralleling other real-world data and RCT results.

SOL 002

Prognostic factors affecting high risk endometrial carcinoma: a retrospective study

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Background: Worldwide, Endometrial carcinoma is the 2nd most common gynaecological malignancy in women. Prognostic factors that include patient age, tumor grade, histological type, lymph node involvement and Lymphovascular Space Invasion (LVSI) are considered to be independent factors that can affect choice of treatment while having impact on Overall Survival (OS) and Disease-Free Survival (DFS). This retrospective clinical study is aimed to investigate the effect of prognostic factors in patients with high risk Endometrial cancer.

Materials and methods: The medical records of all patients diagnosed with high risk Endometrial carcinoma with high risk histology (clear cell, serous, carcinosarcoma, undifferentiated), high-grade (grade 3), advanced stage (FIGO III or IV) who had undergone adjuvant chemoradiotherapy + Vaginal brachytherapy followed by adjuvant chemotherapy were reviewed. OS and DFS were calculated with respect to each prognostic factor using log rank test and Kaplan Meier plot.

Results: 34 patients diagnosed with high risk Endometrial carcinoma between January 2018 to December 2022 were reviewed. Median age was 62yrs with overall OS and DFS of 41 months and 39 months respectively. The data indicates that age group <62 years had significantly better OS and DFS compared to patients >62 (p=0.002 vs 0.003). Grade 2 & 3 tumors were associated with poorer outcomes in both OS and DFS compared to Grade 1 (p=0.045 vs 0.001). High risk histology yielded poorer outcomes than endometrioid histology, with OS and DFS (p=0.002 vs 0.004). The absence of LVSI had significantly improved OS and DFS (p=0.0032 vs 0.003). Additionally, patients with node negative status exhibited significantly better OS and DFS with similar p value(p=0.003).

Conclusion: This study shows that young age, grade 2 & 3, endometroid histology, absence of LVSI, and node negative status are favorable prognostic factors for both OS and DFS in high risk endometrial carcinoma.

SOL 003

Precision therapeutic strategies in Her2- driven colorectal cancer

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Background: Increasingly biomarker expression is driving therapeutic decision making in treatment of advanced cancer .Approximately 3-5 % of colorectal cancer (CRC's) have amplification of HER2 oncogene or overexpress its protein product , HER2 in wild type KRAS .Her2 over expression can be detected in tumour tissue by IHC or FISH studies . Targeting of HER2 amplification is an established approach in metastatic CRC's . Multiple potent HER2 directed therapeutic options have been approved for HER 2 positive metastatic CRC's who have received prior systemic treatment or have no other satisfactory alternative treatment options .

Methods: Here we present a 66 yr old woman with RAS/BRAF wild type HER2 positive metastatic CRC , initially diagnosed with oligometastatic rectal cancer with Liver only metastasis amenable for curative surgery . She completed neoadjuvant systemic chemotherapy , underwent concurrent chemo-radiation as part of local therapy , surgical resection of liver metastasis and completed perioperative chemotherapy for a period of 6 months duration. Assessment at the end of chemotherapy was suggestive of progressive disease with appearance of new lesions in the lung and hence rectal surgery was abandoned and she was started on targeted therapy with lapatinib and trastuzumab. Patient had symptomatic clinical benefit but had radiographic progression in a short duration of 3 months where lapatinib was switched to tucatinib with continuation of trastuzumab .She further progressed 3 months later , with change of therapy to pertuzumab and trastuzumab with S1 chemotherapy . She again progressed within 3 months with appearance of symptomatic brain metastasis . Completed cyberknife radio surgery for brain metastases . Currently she is being initiated with fam-trastuzumab deruxtecan and is of expected to show favourable responses rates .

Conclusion : This report presents a rare variety of Metastatic colorectal cancer with HER2 amplification. Significance of this case lies in emphasising the testing of HER 2 because of the availability of advanced , new and precision treatment options which can provide durable and favourable response rates .

SOL 004

Exon-9 Mutated Metastatic Gastric Gastrointestinal Stromal Tumour (GIST): A Case Report from Temple-City of India

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Introduction: GIST patients tend to harbour cKIT mutations in ~75-80%. Exon-9 mutation in cKIT is a very rare variant and requires patients to be treated with an increased dose of Imatinib (400mg BD) due to partial sensitivity at standard dose. We present one such case report for better understanding of this mutation and its management.

Aims & Objectives: To understand the clinical characteristics of an Exon-9 mutant GIST, its response to Imatinib after dose reduction due to toxicity and duration of response with reduced dose.

Materials and Methods: 43 years old male with newly diagnosed metastatic gastric GIST harbouring cKIT Exon-9 mutation. The patient is part of an on-going, prospective study in newly diagnosed GIST- including patterns of mutations and treatment outcome based on mutation status.

Results: Block was sent for mutational analysis and cKIT Exon-9 mutation was detected. Patient was started on Tablet Imatinib 400mg BD leading to febrile neutropenia; eventually reduced to 400 mg OD due to poor tolerance. Despite dose modification, the patient continued to maintain a good response clinically as well evidently on imaging at 8 months.

Conclusion: Treatment paradigm has been a game changer in metastatic cKIT mutant GIST with improvement in outcome with Imatinib. The feasibility of administration of 800 mg Imatinib in this patient was quite challenging in the real world setting given the poor tolerance and repeated dose modification; however a maintained durable response and good subjective response was observed.

SOL 005

Extra-cranial cystic schwannoma of the spinal accessory nerve

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Background Schwannomas are slow-growing and benign tumors that arise from Schwann cells, which cover the axons from the peripheral nervous system . 8% of primary intracranial tumors, and 90% of those originate from the vestibular nerve. Accessory nerve schwannoma is the least common of those arising from the lower cranial nerves, and only 63 cases have been reported in the literature and extra cranial schwanomma are even rarer.

Case presentation Our patient is a 50 year old lady who presented with complaints of deviation of tongue to the left side, wasting of the tongue on the right side along with fasciculations. Imaging revealed a 2x3 cm lesion in the upper part of right neck extending into the hypoglossal canal, likely to be a schwanomma possibly arising from the hypoglossal nerve. She was taken up for excision biopsy of the same. On table, the hypoglossal nerve was isolated and seemed to be free. However the said lesion was cystic in consistency and arising from the spinal accessory nerve compressing the hypoglossal nerve. The tumor was excised in entirety by sacrificing the spinal accessory nerve. Final histopathology report confirmed it to be a schwanomma

Conclusion Spinal accessory schwanomma is an uncommon entity and cystic extra-cranial variant is even rarer with this being the first case reported in literature. An awareness of this pathology is crucial in the differential diagnosis of deviation of tongue.

SOL 006

A comparative study to predict the efficacy of Risk of Malignancy Index (RMI)-V score and OVRADS score preoperatively in assessing the characteristics of Adnexal lesions- A retrospective single centre study with review of literature.

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Background: Adnexal mass is one of the common conditions seen in patients across age groups. Distinction from benign and early diagnosis of malignancy are critical in deciding the management which plays a major role in the prognosis of the patient diagnosed with malignancy. Risk of malignancy index (RMI) is a practical and simple scoring system used to assess the nature and characteristics of the lesion. OVRADS developed by the American College of Radiology is also used in triaging of adnexal masses, however no one system is better than the other and the predictiveness of each of the scoring system have not been analyzed.

Objective: To analyze & predict the efficacy of RMI and OVRADS scores in assessing the characteristics and nature of adnexal lesions of the ovary preoperatively.

Methodology: A retrospective observational study for a period of 2 years from January 2022 - January 2024 in all patients > 14 years of age, visiting Vydehi Institute of Medical Sciences, Oncology OPD. Preoperative Ca125, ultrasound reports and/or MRI reports were analyzed and RMI- V score and OVARDS score were calculated and compared with post-operative histopathology report.

Results: Total of 120 patients (n=120) were analyzed. Most were premenopausal. Majority of the lesions were benign, serous cystadenoma of ovary being the most common and epithelial ovarian carcinoma was the most common amongst malignant lesions.

Conclusion: RMI - V score has a better prediction of malignancy than OVRADS score in our study.

SOL 007

Non gestational choriocarcinoma of the ovary: A case report

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Background: Non-gestational choriocarcinoma of the ovary (NGCO) is an extremely rare clinical condition. Few cases of this high-grade malignancy of the ovary are reported in literature.

Case Summary: A 24-year-old sexually inactive woman was evaluated at a tertiary care centre in north-east India with right adnexal mass & elevated β-HCG (2.1 lakh mIU/ml). A laparotomy debulking surgery was performed with partial excision of mass and infra-colic omentectomy. Histopathological analysis suggested choriocarcinoma. Her pain persisted, so, CECT scan of abdomen was done and showed liver metastases. She presented to our hospital with altered sensorium, hyperbilirubinemia and transaminitis and β-HCG levels of 6 lakh mIU/ml. She was clinically suspected for NGCO with liver and lung metastases and managed with pre phase chemotherapy, with etoposide and carboplatin. The patient improved clinically and biochemically, so, chemotherapy was continued with BEP chemotherapy (bleomycin, etoposide and cisplatin). Further, at review for 3rd cycle by day 8 of bleomycin revealed bleomycin skin toxicity; hence, further bleomycin was withheld and chemotherapy was completed with 4th cycle EP. Now patient is asymptomatic and β-HCG became 13 mIU/ml, and, currently in follow up.

Conclusion: NGCO has poor prognosis and high mortality rate, hence, early diagnosis and timely initiation of chemotherapy are important. However, due to non-specific symptoms of the disease, it may be easily misdiagnosed, leading to delayed treatment. Therefore, high level of clinical suspicion is pivotal to avoid missing the diagnosis of such disease.

SOL 008

Clinical Profile and Treatment Outcomes in Elderly Women with Cervical Cancer: A Tertiary Cancer Centre Experience

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Introduction: Cervical cancer is a major health problem with increasing incidence among the elderly. Patients aged 65 or above account for around 15% of all cervical cancer cases in India. Cervix cancer in elderly is a subject to many questions in terms of screening and is a therapeutic challenge. This study is a retrospective analysis of demographic and clinical profile of elderly patients suffering from cervical cancer visiting at our institute.

Methods: Records of 68 females aged 65years and above, diagnosed with cervical cancer between 2015 to 2019 at Vydehi Cancer Institute, Bengaluru were studied. Demographic and clinical profile including symptoms, stage, treatment given and complications were noted. The aim was to analyse the differential presentation at diagnosis and challenges faced in treating cervical cancer in the elderly.

Results: The median age of diagnosis is 65years.The major presenting complaint was postmenopausal bleeding in 90% patients. Around 55% presented with Stage II disease and 30% in stage III. Around 25% patients had obstructive uropathy complications and 15% were requiring haemodialysis. Around 81% had associated comorbidities. About 95% were squamous cell carcinoma. Around 15% underwent surgery, 80% received chemotherapy and 90% received radiation (definitive or palliative). Around 20% patients have developed treatment induced complications resulting in discontinuation of treatment.

Conclusion: Elderly women are more often diagnosed with late-stage disease complicated with obstructive uropathy. They often receive less aggressive treatment and have worse outcomes owing to associated comorbidities and intolerance to treatment.

SOL 009

A rare case of Neuroendocrine carcinoma of the Adrenal gland: Case report

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Abstract: Neuroendocrine carcinomas (NEC) are a group of heterogeneous neoplasms originating from the diffuse neuroendocrine system. They mostly occur in the digestive tract and lungs but rarely occurs in the adrenal gland. There are very few case reports concerning the diagnosis and management of adrenal NEC.

We hereby present a case of localised adrenal neuroendocrine carcinoma in a 24 year old male who presented with abdominal pain and was found to have a well-defined left adrenal mass on CT imaging. Urinary metanephrine and serum DHEA, cortisol were normal. Left adrenalectomy was done and histopathology and immunohistochemistry were suggestive of high grade neuroendocrine carcinoma. PET CT scan showed no metastasis and patient is currently on adjuvant chemotherapy with etoposide and cisplatin.

SOL 010

Treatment and Outcomes of different Prognostic factors and Correlation of AFP and MTD in Hepatocellular carcinoma in a resource limited setting- A tertiary care centre experience

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Background: To assess the treatment outcomes with respect to different prognostic factors in hepatocellular carcinoma and compare the characteristics of Normal or low AFP vs Elevated AFP.

Methods: Retrospective study. From Jan 2018 to Dec 2022, all the Hepatocellular carcinoma patients registered, evaluated and treated in Tertiary care institute were studied.

Results: Total 220 cases registered of which 87% are Males, mean age 57 years. Alcohol and cirrhosis present in about 56% cases, 33% had viral aetiology. 48% were multifocal tumours and 40% patients have portal vein thrombosis.16% of patients present with metastasis of which more common is lung. Most common stage BCLC C 62%, Child Pugh B 68%. Most of the patients started with Sorafenib 78%, Resection 12%, TACE 7%.There is no significant correlation between the Sr.AFP levels with Maximum Tumour diameter (MTD)($p=0.480$), Multifocality($p=0.384$), PVT($p=0.077$) and Cirrhosis($p=0.548$).Of 220 cases 25 cases lost to follow up. So survival analysis done for only 195 cases. Median overall survival was 6 months. With respect to AFP, patients with low AFP had better survival than elevated AFP which is statistically significant ($p<0.01$). In Cox Regression analysis, Portal vein thrombus($p<0.001$), Alcoholism($p=0.001$), Cirrhosis($p=0.009$), BCLC stage($p<0.001$) and Child pugh Score($p<0.001$) shows statistically significant difference in survival. Others factors like Tumour diameter($p=0.081$), Nodal status($p=0.409$), Multifocality($p=0.084$), Viral etiology($p=0.303$) shows no significant statistical difference in survival.

Conclusion: Regarding Sr.AFP there is no correlation between the tumour characteristics. Patients with Low AFP also presents with advanced disease and vice versa. So for patients with low AFP other markers like PIVKA, EpCAM, Glypican3 can be used. But these markers need to be evaluated in detail. In our study Sr.AFP, PVT, Cirrhosis, BCLC Stage and Child pugh score were determined to be the important prognostic factors predicting survival mainly in a resource limited setting. This will help in treating the HCC with poor prognostic features aggressively.

SOL 011

Olanzapine a Low-cost Alternative for Preserving Quality of Life amongst Breast Cancer Patients Receiving Highly Emetogenic chemotherapy - a prospective single centre experience from South India

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Introduction: Chemotherapy-induced nausea and vomiting (CINV) adversely affects the quality of life (QOL) of breast cancer patients receiving highly emetogenic chemotherapy (HEC). Neurokinin-1 receptor antagonist (NK-1 RA) based regimen, is best-in-class for controlling CINV and preserving QOL. We studied whether Olanzapine, an emerging low-cost option was equally efficacious in preserving the QOL.

Objectives: Primary: To compare the efficacy of NK-1RA with Olanzapine in preserving the QOL amongst breast cancer patients receiving HEC (Adriamycin or Epirubicin with Cyclophosphamide) **Secondary**: To assess Complete response (CR) and No significant nausea (NSN) between the 2 groups.

Materials and methods: A prospective observational study from June 2022 till December 2023. Data was collected using the CINV diary and QOL using the FLIE questionnaire.

Results: A total of 113 patients were followed across the first two cycles of chemotherapy. Fifty patients received Olanzapine and 63 received NK-1 RA (Netupitant - 29; Fosaprepitant - 34) based therapy. QOL was no different between the 2 groups. The CR rate across all phases of CINV was superior for NK-1 RA [95.2%(n=60), 93.7%(n=59) and 92.1%(n=58) and in Olanzapine were 76% (38), 74% (37) and 68%(34) respectively]. However, the nausea was equally controlled in both groups.

Conclusion: Olanzapine is as a good alternative to NK-1 inhibitors in resource-constrained settings to preserve the QOL amongst breast cancer patients receiving HEC.

SOL 012

Virtual planning and 3D models in mandible reconstructive surgery after cancer resection - case report

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Background: Mandibular reconstruction after ablative tumour removal is a challenging task to surgeons, to achieve the best possible functional and esthetic outcomes. The shaping and position of fibula free flap in mandibular reconstruction was based on the surgeon's experience in the past. This operation is difficult to control during conventional surgery and occasionally result in dissatisfying occlusion and appearance. Now, with the virtual planning and 3D printing modeling using preoperative computed tomographic (CT) data has been introduced to permit more accurate reconstruction.

Case report : Presenting a case report of a 60 year old male patient case of right mandible squamous cell carcinoma. Treatment planned was hemimandibulectamy crossing midline with neck dissection and fibula free flap reconstruction. Pre operative scan images was fed into the software and virtually osteotomy cuts were made as per the surgical plan. The shaping and placement of fibular bone were planned by visualizing the reconstruction superimposed by mirroring tools from opposite side of mandible. Fibula cutting guide, mandible model and templates were printed as STL models pre opearatively recon plate was pre bent. This saved enough time intra operatively and provided a more precise reconstruction and very stable occlusion post opearatively. One year post op and 5 years post op patient is very satisfied with his facial appearance without faical disfigurement ,occlusal cant and functionally best possible occlusion.

Practice Changing Points: This case implies that the use of computer-assisted design and 3D printing modeling in selected patients could save operation time and improve the accuracy of mandible reconstruction. We believe that this technology for mandibular reconstruction will become a used method and improve patients' quality of personal and social life

SOL 013

Adult Renal Ewing's Sarcoma/Primitive Neuroectodermal Tumor: A 20-Year Retrospective Review of Molecular Histopathological Profiles, and Clinical Outcomes.

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Background: Renal Ewing's sarcoma/primitive neuroectodermal tumor (ES/PNET) among adults is an extremely rare malignancy. Accurate diagnosis mandates detailed immunohistochemistry (IHC) and molecular characterization. There is limited data on the treatment and of these patients. We present a clinicopathological and molecular profile of renal ES/PNET from a single South Indian tertiary referral center.

Results: We included 25 patients with renal ES treated at our center from 2003-2023. 68% were male, with median age 29 years (18-53). 8(32%) had localised disease and 17(68%) had recurrent/metastatic disease; lung(36%) and bone(28%) were the common sites of metastases. Median tumour size was 13.5cm and renal vein/IVC thrombus was present in 11(55%) patients. IHC(done in 24 patients), showed CD99 +, NKX 2.2 + in 100% and FLI1 + in 93.7%. RT-PCR/FISH done in 15 patients revealed EWS-FLI1 translocations in 5 patients, 4 of which were Type 1. Nephrectomy was performed in 19 patients: 8 radical for non-metastatic and 11 palliative for metastatic disease. 11 patients additionally received concurrent radiation(4 curative vs 7 palliative). 16 received systemic therapy, the median number of cycles being 10(Range:2-16). 11 patients received concurrent radiation. Grade 3/4 anaemia, thrombocytopenia, neutropenia, and febrile neutropenia was seen in 1(6.6%),1(6.6%),8(50%) and 8(50%) patients respectively during VAC/IE. Only 50% of patients had long term follow up. Survival at 3 years is 64.3%(83% for localised disease, 57.3% for recurrent/metastatic).

Conclusion: This study represents a substantial cohort of adult patients with renal ES/PNET undergoing a unified treatment approach. Predominantly, tumors presented as extensive and locally aggressive with favourable survival for localised disease. While these observations offer valuable insights, the rarity of the disease underscores the need for larger, multicentric studies for more definitive conclusions.

SOL 014

Assessing the feasibility, safety and efficacy of FLOT regimen in gastroesophageal cancer patients: Prospective study from a tertiary care centre in a developing country

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Background: Perioperative chemotherapy has become the standard of care for loco-regionally advanced gastroesophageal adenocarcinomas.

Aims and objectives : To evaluate the safety and efficacy of FLOT chemotherapy in the Indian population.Primary objective: rate of pathological complete tumour regression. Secondary objective: Overall survival ,progression-free survival ,R0 resection rate, surgical morbidity and mortality, and adverse events

Methods: In this single-center prospective cohort, patients with locally advanced gastric adenocarcinoma who required chemotherapy between February 2022 and May 2024 were included in the study. All patients received FLOT chemotherapy.

Results: Total 39 patients recieved FLOT.All the patients had a ECOG PS of 1. Median age was 53 years (31-70) with a male:female ratio 2:1.Most common associated addiction and comorbidity were smoking (12.8%) and hypertension (15.4%).Most common presenting complaint was pain abdomen (22 patients-56.4%).Majority of patients presented with Hb>10 (23, 59%) whereas severe anemia was seen in 10.3% of the patients.Most common site was stomach (27, 69.2%) and most common subsite was GEJ (11, 28.2%).All patients had adenocarcinoma histology with majority being grade II (22, 56.4%).After neoadjuvant FLOT completion 22 patients out of 39 have undergone definitive surgery with R0 resection seen in 77.3%. 7 patients have been deemed inoperable intraoperatively. Complete pathological response TRS 0 was seen in 3 out of the 22 patients (13.6%). Planned completion of FLOT chemotherapy was seen in 84.6% (33) patients with tolerable adverse events (mucositis,diarrhoea,neutropenia), majority being grade I or II.

Conclusion: Administration of FLOT regimen in locoregionally advanced gastric cancers is feasible in clinical practice with high completion rates, though requiring dose modifications due to the incidence of clinically relevant toxicities.

SOL 015

Radiotherapy for heterotopic ossification of elbow: case series and literature review

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Background: Heterotopic ossification (HO) involves abnormal bone development in non-osseous tissues, leading to joint stiffness and limited movement. Radiotherapy is a well-established treatment for HO, capable of inhibiting osteoprogenitor cell growth. However, its preventative use, especially in the elbow, is still under investigation due to potential adverse effects.

Objective: To observe the clinical outcomes and adverse effects of a common dosing schedule of radiotherapy as an adjuvant treatment for HO in the elbow joint.

Material and methods: four patients aged 21 to 54 presented with restricted movement and pain in the elbow joint, following orthopedic procedures 2-4 months earlier due to trauma. Diagnosed with Myositis Ossificans via further evaluation, they underwent excision of the extraosseous lesion and were referred to Radiotherapy within 48-72 hours. Each patient received external beam radiotherapy (EBRT) using 2D Cobalt-60, with a total dose of 10 Gy delivered in 5 fractions.

Results: After 4-15 months of follow-up, patients showed almost complete improvement in elbow joint range of motion and complete pain reduction, with no significant toxicity observed.

Conclusion: This case series demonstrates the successful use of radiotherapy as an adjuvant treatment for HO in the elbow. Further research is needed to establish standardized protocols and evaluate long-term outcomes, contributing to evidence supporting the efficacy and appropriate dosing of radiotherapy for HO prevention.

SOL 016

Prognostic factors affecting the Overall survival and Disease-free survival in carcinoma lung patients treated with Sequential Chemoradiation and Concurrent Chemoradiation

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Background: Lung cancer is the most commonly occurring cancer worldwide accounting for 12.4% of total new cases and also the leading cause of cancer deaths (18.7%). In India, lung cancer accounts for 5.8% of new cases and 8.2% of cancer deaths. Chemotherapy and radiation therapy plays a major role in treatment especially in inoperable cases.

Objective: In this study we evaluated the factors which could affect the overall survival (OS) and disease -free survival (DFS) in patients with lung carcinoma treated by Sequential CTRT and Concurrent CTRT.

Methods and Materials: A retrospective review of 38 patients with lung carcinoma treated with Concurrent CTRT or Sequential CTRT from January 2017 to December 2021 was done. Various factors like age, gender, habits, disease laterality, histology, group stage, treatment received and radiation dose were evaluated. Results were analyzed by Fischer exact test and SPSS.

Results: Median age of patients was 65 years. The majority were men (89.4 %) and smokers (57.8%). Adenocarcinoma (63.2%) was the most common histological type followed by squamous cell (18.4%) and small cell carcinoma (18.4%). Majority were left sided tumors (52.6%). Most common stage was IIIA (44.7%) followed by IIIB (39.5%). Most of the patients were treated with sequential CTRT (78.9%) and the rest with definitive CTRT (21.1%). The mean radiation dose used was 61.82Gy (range: 45Gy-66Gy). The 2-year OS and DFS in all patients was 21% and 18.4% respectively. OS and DFS was better in patients diagnosed at young age (36-45 years), females, non-smokers, adenocarcinoma histology, left sided tumors, stage IIIA and treated with sequential CTRT but was not statistically significant except for Stage IIIA (p=0.007) and left sided tumors (p=0.029) which had significantly better OS and DFS respectively.

Conclusion: This study shows that young age, females, non-smokers, left sided tumors, adenocarcinoma histology, lower stage and patients treated with sequential CTRT are favorable prognostic factors for OS and DFS in lung cancer patients.

SOL 017

Breast Cancer in Young Women: Analysis of Incidence, Clinicopathological Profile and Biological Behaviour in a tertiary care institute from South India

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Aims and Objectives: There is an increasing incidence of breast cancer in young women and many of these patients are considered to have more aggressive disease biology. The study aimed to find out the demographic profile, clinicopathological profile, and management details in patients under the age of 40 years treated for Breast cancer in a tertiary care institute.

Materials and Methods: The study retrospectively analysed all the females with biopsy proven breast cancer treated at our oncology department between January 2012 to December 2018. The data related to demographic profile, clinical, pathological and treatment details were collected from medical records for the patients under the age of 40 years and analysed.

Results: A total of 1056 biopsy proven breast cancer patients were treated during the study period. Out of which, the breast cancer patients under the age of 40 years were 161 (15.24%). The mean age at presentation was 33 years. Maximum patients were between the age group of 35-40 years (45.4%). Most of the patients were presented with Stage III (44%). Infiltrating Ductal Carcinoma, Grade II was the most common histologic type and grade. ER (Oestrogen Receptor) positivity seen in 49% of patients and PR (Progesterone receptor) Positivity in 49.7% and 46% had HeR2 Positivity.

Conclusion: Our study concludes that the incidence of breast cancer patients under the age of 40 years is increasing. These patients tend to have higher grade tumours, Her2 Positive and triple-negative breast cancer. Young patients presenting with breast lumps should undergo all standard screening and diagnostic investigations must be carried out for early diagnosis and proper interventions.

SOL 018

Cancer Care in Elderly Patients A Record Based Retrospective Analysis of Clinical Profile and Overview of Treatment

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Background and Objective: Cancer can develop at any age, but the incidence of cancer rises dramatically at a later stage in life. Cancer management in older people can be complex. Comorbidity and Physiologic age-related changes can affect how and when cancer is diagnosed, whether or not treatment is offered and the individual tolerance to anticancer therapy. This retrospective study aimed to assess the clinical profiles of elderly cancer patient to optimize cancer care.

Materials and Methods: This retrospective study comprised cancer patients attended our oncology department between 2018 to 2022 who were above the age ≥65 years. All the information regarding the type of cancer, performance status, intent of treatment, treatment completion and follow up status at 3 years were documented and analyzed.

Results: A total of 230 patients were included in the study. The common malignancies were Carcinoma Head and Neck and Lung Cancer followed by Esophagus and Colorectal malignancies. Most of the patients presented with Performance Status of 1 (57.8%). The intent of therapy was curative in 49.1% and Palliative in 30.1% patients. At median follow up 36 months 15% of treated patients were on regular follow-up and they were alive without disease.

Conclusion: Head and Neck Cancer was the most common cancer seen in our study. Elderly patients with cancer were presented with good performance status, hence Elderly Cancer patients deserve same opportunity as younger patients for treatment and survival options.

SOL 019

A rare case of Proliferating Trichilemmal Tumor Treated with Radiotherapy

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Abstract: Proliferating Trichilemmal Tumor (PTT) is a rare tumor of the outer root sheath of the hair follicle with different biological behavior. They usually develop in older patients, most commonly affecting women, from pre-existing pilar cyst. Histologically, this tumor may mimic squamous cell carcinoma (SCC). The standard of treatment is surgical excision with a margin of normal tissue. As most of the patients are not good surgical candidates, Radiotherapy plays an important role in the management of this tumor. We report a case of PTT on the occipital region of a 79-year-old female with its brief overview. In view of large size of the lesion and advanced age of the patient, Neoadjuvant Radiotherapy was planned and delivered. A near complete response of the lesion to radiotherapy was observed with good cosmesis. We discuss the role of radiotherapy in the management of PTT in various settings with literature review.

SOL 020

Trends in head and neck cancer incidence in relation to Tobacco Usage in Young: A retrospective single-center study

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Objectives: Epidemiologic analyses have shown disproportional increases of head and neck squamous cell carcinoma (HNSCC) incidence in a younger age group and is characterized by a distinct clinical and etiological phenotype. We aimed to characterize clinical and etiological of primary HNSCC in young patients.

Methods: A total of 125 biopsy proven HNSCC patients of age less than 40 years were enrolled in this study. The details regarding the Clionico-pathological profile, History of Smoking and Tobacco Chewing details were collected from the patient records and were analysed.

Results: A total of 125 patients were analysed. Male to Female ratio was 2:1. Maximum number of the patients were at the age group of 30-35 (46%). 48.1% of the patients had history of smoking with mean duration of smoking of 14 years and 23.1% patients had history of tobacco chewing. Oral Cavity (74.5%) was the most common site of Occurrence. In Oral Cavity , Buccal Mucosa (48.7%) was the most frequently affected site followed by Oral Tongue (24.4%). Stage III (36%) followed by Stage IV (19%) was the most predominant stage.

Conclusion: Our results suggest that Oral Cavity Cancer was the most commonly affected site in HNSCC in young. The increased risks observed with earlier age at starting tobacco usage and are largely due to longer duration and higher cumulative tobacco exposures.

SOL 021

Real world outcomes of metastatic breast cancer patients treated with eribulin mesylate: An experience from a tertiary cancer- care centre in south India

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Background: Eribulin mesylate used in metastatic cancer, is a non-taxane microtubule inhibitor having non mitotic effects including vascular remodelling and suppression of cancer cell migration. Eribulin has been approved by the European Union in 2011 for treating metastatic breast cancer who have progressed on at least one chemotherapeutic regimen; and by the U.S. FDA for treating metastatic breast cancer who have received at least two prior chemotherapeutic regimens including both anthracycline and taxane-based chemotherapies

Methods: Patients with metastatic breast cancer based on eligibility criteria treated with Eribulin during the period of 6 years from June,2016 to December, 2022 were included in the study. Clinical outcomes in terms of objective response rate(ORR), progression free survival(PFS) and overall survival(OS) were assessed. Also, the side effects with Eribulin were documented.

Results: We evaluated 30 patients with metastatic breast cancer who received Eribulin during the period of June,2016 to December, 2022 and had received anthracyclines and taxanes as prior chemotherapeutic regimens. Patients who received a minimum of three cycles and response assessed were considered. Of these 30 patients, 19 patients received 3 or more than cycles. The ORR was 63.33% . The PFS was found to be 5.1 months and OS was 13.0 months. Although 48 % of the patients had no side effects to treatment, the most common adverse effect was that of fatigue seen in 73% individuals, peripheral neuropathy seen in 26% individuals, followed by cough seen in 9.75% patients. 1% patients had more than grade 3/ grade 4 neutropenia.

Conclusion: Our study reinforces the meaningful effectiveness of Eribulin in metastatic breast cancer with safety and tolerability profile consistent with historical data. We need further prospective comparative studies to prove the same.

SOL 022

Real world data of oral metronomic chemotherapy (OMCT) in locally advanced or metastatic penile squamous cell carcinoma (SCC)

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Introduction: Penile SCC's are rare malignancies with dismal outcomes when treated with a palliative intent. Triple-OMCT has shown survival benefit in patients with locally advanced Head-Neck SCC.

Objectives: To explore the efficacy and safety of Triple-OMCT as palliative chemotherapy in penile SCC.

Materials and methods: This was a retrospective observational study conducted at our institute between June'14 and April'24. Patients with inoperable or metastatic penile SCC treated with Triple-OMCT (Methotrexate, Erlotinib, Celecoxib) were included in this analysis.

Results: 22 patients were evaluated. Median age was 55.5 years (IQR,46.7-65.5), 9.1% (n=2) were HIV+, and 95.5% (n=21) had ECOG-PS 0-2. p16 was positive in 27.7% (n=5) patients. Median lines of treatment prior to OMCT initiation were 2 (IQR,1-2). 50.0% (n=11) patients had metastatic disease with lung metastasis (54.5%, n=6/11) being most common. Clinical response was obtained in 68.2% (n=15) patients. 33.3% (n=4), 16.7% (n=2), and 50.0% (n=6) patients had partial-response, stable-disease, and progressive-disease on radiological evaluation. Objective-response-rate was 33.3% and the disease-control-rate was 50.0%. Median follow-up was 34.5 months (95%CI,12.4-56.7) while median PFS was 5.9 months (95%CI,3.8-8.1). Patients with a clinical response [6.3months (95%CI,5.7-7.0) versus 3.0months (95%CI,2.1-4.0), p=0.012, for those without a response] had improved PFS with OMCT. Grade 3/4 toxicities were seen in 18.2% (n=4) and none discontinued treatment.

Conclusion: Triple-OMCT is a safe and active regimen in patients with penile SCC and warrants exploration in larger clinical trials.

SOL 023

Analysis of Lung Cancer Management and Outcomes: Real World Insights from AIIMS Rishikesh

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Background: Lung cancer remains a significant global health challenge; lung cancer was the most frequently diagnosed cancer in 2022, responsible for almost 2.5 million new cases. In India, lung cancer ranks among the top five cancers, comprising 81,748 cases (5.8% of all cancers), with 75,031 deaths recorded in 2022. This study aims to provide insights into lung cancer patients' demographic profile, clinical characteristics, management strategies, and outcomes at AIIMS Rishikesh, India.

Methodology: Data were prospectively collected from the Cancer Registry at AIIMS Rishikesh from July 2022 to January 2024. Demographic, clinical, and treatment-related information was recorded and analyzed using descriptive statistics. Statistical analysis was conducted using the ver.24 of the SPSS tool.

Results: A total of 186 lung cancer cases were studied, with a mean age of 59 years and a male-to-female ratio of approximately 3.22:1. Most patients originated from Uttarakhand and Uttar Pradesh, with 80.65% having a smoking history and 31.2% reporting alcohol consumption. The most common symptoms were cough (70.3%), chest pain (56.0%), dyspnea (46.7%), hemoptysis (20.3%), and anorexia (13.1%). Non-small cell lung cancer (NSCLC) accounted for 79.03% of cases, with squamous cell carcinoma (51.7%) and adenocarcinoma (47.6%) as the main subtypes. Small cell carcinoma made up 15.05% of cases. Immunohistochemistry (IHC) was performed in 53.8% of cases, with markers such as TTF1 (26.3%), p40 (18.3%), CK7 (7.5%), and others being assessed. Mutation analysis, limited by financial constraints to 52.6% of cases, revealed EGFR mutations in 33.6%, mainly exon 19 deletions (54.5%) and exon 21 mutations (12.1%). ALK and ROS1 mutations were found in 4.08% and 2.04% of cases, respectively. Most patients presented at advanced stages, with therapy primarily aimed at palliation. Chemotherapy, particularly paclitaxel + carboplatin, was the most common treatment. Therapy delays and dose modifications were primarily due to toxicity, and a high proportion of patients were deceased during follow-up.

Conclusion: This prospective analysis provides comprehensive insights into the management and outcomes of lung cancer patients at AIIMS Rishikesh. The findings underscore the challenges and complexities in the management of lung cancer, emphasizing the need for tailored approaches to improve patient outcomes.

SOL 024

Desmoplastic round cell tumor- Stomach

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Background: Desmoplastic small round cell tumour (DSRCT)is a rare neoplasm with extremely aggressive behaviour. Despite the multimodal treatment for newly diagnosed patients with chemotherapy, cytoreductive surgery and radiation, the cure rate is still low.

Case Report: This case report describes the clinical presentation, diagnosis, management, and outcome of a 15-year-old male patient, presented initially with complaints of nausea, abdominal pain and loss of appetite. CECT showed retroperitoneal lesion involving pancreas+ lesser curvature of stomach with vascular encasement and multiple lymph node and biopsy suggestive of poorly differentiated carcinoma. Slide review s/o Malignant round cell tumour**.** IHC in view of EMA, SYNAPTOPHYSIN, CK RARE and DESMIN POSITIVITY, confirmed DESMOPLASTIC ROUND CELL TUMOUR.

Discussion: Due to the rarity of the present tumour's location, the diagnostic challenges it posed, and the therapeutic strategies employed. The case highlights the importance of immunohistochemistry and molecular genetics in confirming the diagnosis and guiding of the treatment.

Conclusion: DSRCT is a rare and aggressive disease and fatal for the majority of the patients. A modest improvement in survival has been observed in more recent studies. A better understanding of disease biology has identified potential targets to be explored and useful in treatment of the disease.

SOL 025

A rare case of primary malignant melanoma of lung

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SOL 026

A rare case of breast lump which turned out as metastasis from ovary

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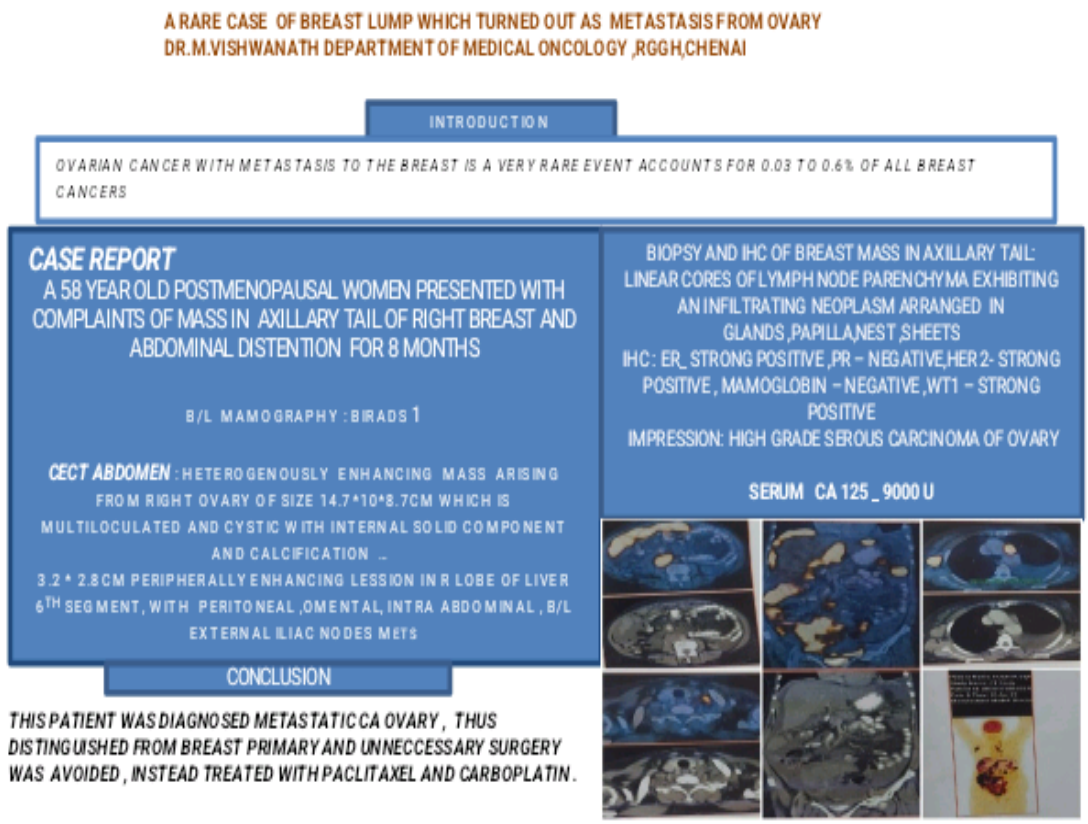

SOL 027

Non-metastatic Breast Cancer in Adolescent and Young Adults – is it different in India? – a multi-centre study from NOCI tumor registry

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Background: Adolescent and Young Adults (AYA) group includes patients aged between 15-39 years. Breast cancer(BC) is the 3rd most common cancer among AYA in India with limited data from India in this subset.

Objective: To study the clinicopathological profile of AYA patients with non-metastatic BC and factors affecting survival.

Methods: This is a retrospective observational study conducted across six tertiary care NOCI centres in India; the clinicopathological and survival data of AYA BC patients diagnosed and treated in the period of January 2015 to December 2021.

Results: Out of 7904 BC patients in the tumour registry, 199 BC patients were in AYA group of which 189 had non-metastatic BC. Median age was 36 years.Infiltrating ductal carcinoma, grade 2 and ER positive-Her2 negative was most common profile. At diagnosis 16, 86 and 87 had stage I, II and III respectively. Upfront surgery was done in 149 patients and 40 received neo-adjuvant chemotherapy. The median follow-up was 37 months. Three-year PFS and OS was 94% and 94% , 89% and 95%, and 68% and 68% for stages 1, 2 and 3 respectively. The 3 year PFS and OS was 80% and 84%, 70% and 77%, and 75% and 80% in HR positive, Her 2 enriched and TNBC groups respectively. Histo molecular profile (p value 0.033) and Stage ($p < 0.001$) correlated with survival.

Conclusions: AYA with BC patients in India is different with more of hormone positive-Her2neu negative histological profile.Early stage at diagnosis and hormone positivity correlated with better survival.

SOL 028

A Retrospective study of periampullary carcinoma at a tertiary care centre in South India

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Background: The incidence of Periampullary carcinoma is very rare unlike Pancreatic carcinoma. Datas about the periampullary carcinoma is sparse in Asia. So this study highlights the clinicopathological profile, OS,PFS in Periampullary carcinoma.

Objective: To study the clinicopathological profile of periampullary carcinoma

Methods: This is a retrospective observational study of clinicopathological and survival data of periampullary carcinoma patients diagnosed and treated between January2019 and December2023 at a tertiary care centre in South India;. OS and PFS were studied with Kaplan-Meier curve.

Results: Out of 72 patients (45 male and 27 female) . Median age was 57 years (50-59). Obstructive jaundice was the presentation in 91.7%. Alcohol and smoking were observed in 27% and 18% respectively. Ca19.9 was elevated in 77.8%. At diagnosis, 31.9%, 15.3%, 30.6%, 22.2% of patients presented with Stage I, Stage II, Stage III, Stage IV respectively. The most common histology was the mixed type(59.7%) . The most common disease location was ampullary region (55.1%) followed by head of pancreas (26.4%) distal bile duct(13%) and duodenal(5.6). 65.3% of patients went for upfront surgery of which 100% had R0 resection. The median OS and PFS were 34.6 months and 30.49 months respectively across all stages.

Conclusions: Periampullary carcinoma presents in early stage with most of the patients presenting with obstructive jaundice. Median overall survival and progression free survival were better than pancreatic cancer.

SOL 029

Biopsy battle: endometrial cancer diagnosis showdown- "PIPELLE VS HYSTEROSCOPY"

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Introduction: Endometrial carcinoma ranks fourth in prevalence and eighth in malignancy-related fatalities among women, diagnosed via histologic findings from various sampling methods. Outpatient biopsy with the Pipelle device is increasingly favored for its simplicity and accessibility in diagnosing endometrial cancer.

Aim: To show Pipelle's superiority to hysteroscopy in diagnosing endometrial cancer in postmenopausal and perimenopausal bleeding.

Objective:1. To assess Pipelle vs. hysteroscopy-guided biopsy efficacy, patient compliance, complications, hospital stay duration, and procedure cost. 2. To evaluate the ease of obtaining endometrial samples using both.

Materials and methods: this is a prospective comparative study conducted at MMHRC in Madurai.Women aged 40(n=67) and above with heavy menstrual bleeding over a year from Feb 2023 to Jan 2024 were studied. Endometrial sampling via pipelle and hysteroscopy under anesthesia were performed in the same sitting and both were compared.

Results: Median age : 52.5 years(65.7% premenopausal,34.3% postmenopausal). Most common presentation: post menopausal bleeding(34.3%).Statistically significant(P value - 0.017) concurrence between pipelle and hysteroscopy histological diagnosis. Sample adequacy: pipelle- 95.5%,hysteroscopy- 100%. Pipelle biopsy : 100% sensitivity and 98.3% specificity in diagnosing endometrial hyperplasia and endometrial carcinoma (PPV - 83.3%,NPV - 100%). Predominant histological pattern in benign cases: secretory phase(43.2%). No post procedure complication in both. Hospital stay : hysteroscopy-1 day, Pipelle- 0. Cost: pipelle- ₹3000 - ₹4000, hysteroscopy ₹25000-₹30,000.

Conclusion: Pipelle biopsy rivals hysteroscopy for accuracy without the need for anesthesia or hospitalization. Enhanced patient compliance and lesser costs, making it a crucial tool for diagnosing endometrial carcinoma.

SOL 030

Real world experience of clinical outcomes and toxicity profile of oral metronomic chemotherapy in advanced/relapsed epithelial ovarian cancer in a tertiary cancer centre in south India

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Majority of patients with advanced stage epithelial ovarian cancer recur within 2 years of primary treatment. (1) Novel therapies like PARP inhibitors, Angiogenesis inhibitors like Bevacizumab are not affordable for all.(2) Oral metronomic chemotherapy(OMCT) may be a feasible therapeutic option for these patients.

Aims& objectives: To study the clinical outcomes and toxicity profile of OMCT among patients with advanced/relapsed epithelial ovarian cancer treated in our centre.

Materials and methods: This was a retrospective observational study among patients treated with OMCT from 01-01-2017 to 31-12-2021. OMCT comprises cyclophosphamide 50mg per day along with Tamoxifen 40mg per day administered continuously till progression or unacceptable toxicity. Data collected from medical records was analysed with SPSS version24.

Results: Sixty-one patients received OMCT. Median age at diagnosis was 59yrs. Median age at the start of OMCT was 61yrs. Majority had ECOG PS-2. Majority had high grade serous carcinoma subtype. Half of the patients (n=31, 50.8%) had undergone prior cytoreductive surgery. Twenty-two patients(52.4%) had platinum sensitive, 16patients(26.2%) had partially platinum sensitive and 23 patients(37.7%) had platinum resistant disease. OMCT was given as second line therapy in 20 (32.7%) and as third line therapy in 15 (24.5%) patients. Clinical benefit was seen in 59% and Ca-125 response in 34.4%. Mean duration of OMCT treatment was 7.8months. Median PFS was 6.7months.

Conclusion: Oral metronomic chemotherapy is a feasible and cost-effective therapeutic option for advanced/relapsed ovarian cancer worth consideration in resource limited settings.

SOL 031

Post Operative Whole Breast Radiation Therapy in Scleroderma Patients with Breast Cancer- A Case Report

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Background: Connective vascular diseases (CVD), including scleroderma, are reported to represent a relative or absolute contraindication to radiotherapy. Here we report a case of Systemic Sclerosis patient with breast cancer who received adjuvant Radiation to identify the prevalence of radiation complications.

Case presentation: A 37-year-old female patient, with a history of Systemic sclerosis and Interstitial Lung Disease on treatment presented to us with complaints of carcinoma left breast cT2N1M0, she underwent Neoadjuvant chemotherapy with Epirubicin, Cyclophosphamide and Paclitaxel. Later she underwent Breast conservation Surgery and ALND. She received Adjuvant Radiation 46Gy in 23 fractions Followed by Boost 14Gy in 7 fractions by VMAT Technique. During the Course of the treatment she developed grade II skin reaction which was managed Conservatively. No other acute toxicities were found. She is on regular follow up and no radiation related late toxicities were found at the one year follow up.

Conclusion: Patients with scleroderma and breast cancer must be discussed by the multidisciplinary tumour board in order for a personalized treatment strategy to be formulated. Radiation therapy can be proposed as a postsurgical therapeutic option in selected cases.

SOL 032

A rare case of neuroendocrine tumor of the gall bladder

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Background: Neuroendocrine tumors of the Gall bladder are extremely rare with a higher level of aggressiveness as compared to adenocarcinoma of the gall bladder. Due to its rarity, the details of its management and need for adjuvant treatment is quite limited.

Case presentation Our patient is a 62 year old male who presented with upper abdominal dull aching pain for a duration of 1 month with no associated jaundice, loss of weight or appetite. Abdomen was unremarkable. CT of the abdomen revealed a liver mass bulging into the gall bladder with multiple dilated arterial feeders suggestive of an exophytic hemangioma. He was planned for a Transarterial glue embolization. However doing the procedure, there was a suspicion of solid lesion and so FNAC was which showed a Neuroendocrine tumor Grade 1/2. Patient was planned for a resection of Segment 4 of liver. On table, the vascular lesion was found to be arising from the body of gall bladder with multiple vessels supplying from the right hepatic artery. As the lesion was completely arising from the gall bladder, he underwent a simple cholecystectomy and his postoperative period was uneventful. The final histopathology came back as Neuroendocrine tumor of the gall bladder, proven with immunohistochemistry.

Conclusion: Neuroendocrine tumors of the gall bladder are uncommon and surgical resection is the best available treatment option both as a curative and palliative settings.

SOL 033

Beyond the tumour: the metastatic patterns in carcinoma lung IV using the real world evidence

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Background: lung carcinoma has an increasing incidence along with change in pattern of metastasis in recent times. It has drawn the attention towards the adrenal gland incidence and its metastatic spread

Objective: To identify the change in pattern of metastasis in lung carcinoma and identify the incidence of adrenal gland involvement.

Method: a retrospective study of 75 consecutive cases of diagnosised with lung carcinoma stage 4 in the year 2023 were taken into the study and metastatic pattern was observed using whole body PET CT scan and MRI brain at the time of presentation.

Results: rapid decrease of adrenal gland metastasis has been identified . Only 9% cases were having adrenal gland metastasis specifically to bilateral gland involvement, showing the preference to haematological spread compare to lymphatic spread. Other organs like brain, liver bone aremore common than the adrenal gland when compare to the standard studies which showed adrenal gland involvement of 50% and more commonly unilateral involvement.

Conclusion: there is a rapid change in the pattern of the presentation and symptomatic nature of the disease focusing the change the in the approach and disease treatment.

SOL 034

Rare case of extra-skeletal Ewing's sarcoma as second malignancy in a previously treated acute lymphoblastic leukaemia.

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Background: Ewing sarcoma is bone and soft tissue malignancy that predominantly occurs in adolescent and young adults. 80-85% of Ewing's sarcoma is skeletal and 15-20% is extra-skeletal. Post treatment of Ewing sarcoma, approximately 3% of patients develop haematological malignancies. It is extremely rare to find Ewing's sarcoma as second malignancy in treated case of ALL.

Case presentation:20/M diagnosed as B lymphoblastic leukaemia(B ALL) with intermediate risk 4 years ago. Treated with BFM 95 protocol Post induction MRD negative (<0.01)%.Patient was kept on follow up. Patient developed constipation, dysuria on evaluation MRI revealed large soft tissue mass (8.3*7.9*8.2cm) deep pelvic cavity (rectovesical pouch) compressing anterior wall of rectum, abutting prostatic urethra. Biopsy and IHC confirmed Ewing sarcoma. PET CT revealed primary in pelvis and multiple FDG avid lung nodules in bilateral lung. Received pelvic RT 50.4Gy following which symptoms subsided. Started on VAC/IE regimen and completed 8 cycles. Reassessment PET CT revealed complete resolution of primary, increase in size and number of pulmonary nodules with increased metabolic activity, suggestive of disease progression. Planned for second line chemo and whole lung RT.

Conclusion: Extra-skeletal Ewing sarcoma presenting as second malignancy in treated ALL is extremely rare and poses diagnostic dilemma. Multi-disciplinary team (MDT) model of diagnosis and treatment should be helpful for better outcome.

SOL 035

First-line chemotherapy and survival analysis of patients with small cell lung cancer in single institute from South India

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Background and Objectives: Small cell lung cancer (SCLC) accounts for 14%–20% of all lung cancers, yet clinical data are scarce. This study reports the clinical features and treatment outcomes of SCLC treated at our center.

Materials and Methods: This is a single institutional data review of SCLC patients treated from June 2022 to February 2024. Patients were staged as localized or extensive disease after appropriate staging workup. Localized disease patients received concurrent chemoradiation with platinum-based chemotherapy, while those with extensive disease received platinum-based palliative chemotherapy. Clinicopathological characteristics, treatment details, and outcomes were recorded. Survival analysis was conducted on patients who completed the first line of treatment.

Results: A total of 22 patients, all male with a median age of 63 years (range: 52–76), were registered. All had a smoking history, and 23% (n = 5) had superior vena cava obstruction at baseline. Seven patients (32%) had limited-stage disease. Chemotherapy regimens included etoposide-carboplatin in 19 patients (86%) and cisplatin-etoposide in 3 patients (14%). One patient received atezolizumab with chemotherapy. Among the 22 patients, 12 had a partial response, 4 had stable disease, and 6 had progressive disease. After a median follow-up of 9.5 months (range: 3–13.2), the median progression-free survival (PFS) was 3.25 months, and the median overall survival (OS) was 9.36 months.

Conclusions: This study reinforces the effectiveness of platinum-based chemotherapy regimens in managing extensive-stage SCLC. Despite the limited sample size, the observed median OS aligns with historical data, highlighting the persistent challenge in significantly improving long-term survival rates for SCLC

SOL 036

Carcinoma of membranous urethra following stricturoplasty - a rare entity

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Introduction : Primary urethral cancer (PUC) of the proximal urethra is an exceeding rare tumor, whose natural history is particularly aggressive. These tumors occur more commonly in men, and differ by location and histologic subtype. Patient symptoms often include urinary obstruction, irritative voiding symptoms, or hematuria.

Case Presentation: Our patient is a 51year old male a known diabetic & hypertensive with a history of buccal mucosa graft urethroplasty for stricture urethra done 9years ago. He developed re-stricture in 8years for which cystoscopic examination revealed an ulceroproliferative growth in the membranous urethra at the urethroplasty site. Cystopscopic biopsy revealed a well differentiated SCC of the urethra. MRI and PET CT revealed a lesion at the membranous urethra infiltrating the corpora cavernosa with enlarged b/l inguinal and pelvic nodes. FNAC of the nodes revealed - no tumour deposits. Underwent Total penectomy with prostatic urethral excision with bilateral PLND and bilateral ILND with a permanent SPC. Post operative period included bilateral ILND flap necrosis which was managed by local debridement and SSG cover. The Histopathology report revealed a well differentiated squamous cell carcinoma with perineal skin involvement and no evidence of Inguinal or pelvic lymph node metastasis - pathological Stage IIb.

Conclusion: Currently, there is no consensus on PUC treatment. Adjuvant treatment is adjusted individually on case to case basis according to the final histopathology reports.

SOL 037

RDW as a prognostic factor in carcinoma colon

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Background: Red cell distribution width (RDW) is a standard parameter included in complete blood cell counts. Previous research has indicated that RDW levels increase in cases of systemic inflammation and cardiometabolic incidents. However, the relationship between RDW and solid tumors, which also cause systemic inflammation, is not well-studied. This research aims to examine the relationship between RDW and colon cancer.

Objectives: To correlate the RDW values with the prognosis in colon cancer.

Materials and Methods: A retrospective analysis was conducted on 50 patients diagnosed histopathologically with colon cancer at our hospital VIMS & RC between January 2019 and January 2021. We collected their clinical data , tumor pathological features and Measurements of RDW were recorded. The relationship between RDW and colon malignancy were analyzed.

Results: The study found that RDW values were significantly higher in patients with colon cancer. High RDW (H-RDW) was more frequently observed in patients undergoing non-curative resections. Additionally, a higher RDW level was associated with decreased survival in stage I cancers, although it did not impact survival in stages II, III, and IV. P Value is less than 0.05, therefore RDW is a significantly associated with Overall Survival in Stage I and II (Combined) than H-RDW. P Value is more than 0.05, therefore , there is no significant difference between RDW and HRDW – for Stages III and IV

Conclusions: RDW can potentially serve as an early warning biomarker for colon tumors. Further prospective research is required to explore the relationship between RDW and colon malignancies more comprehensively. RDW might act as an independent prognostic factor for overall survival (OS) and disease-free survival (DFS).

SOL 038

Nutritional intake Comparisons Between Gastric Cancer Patients and Healthy individuals

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Background: Gastric carcinoma ranks among the top six most common cancers worldwide. Advances in sequencing have shown that gut microbiota changes may play a role in gastric cancer development. The World Cancer Research Fund/American Institute for Cancer Research recognized that fruits and vegetables can protect against gastric cancer, while dietary carcinogens may provoke genetic changes in gastric cells.

Objective: This hospital-based case-control study aims to investigate the comparison of dietary intake between the patients with gastric patients and healthy population.

Methods: A newly developed and validated FFQ was used to evaluate food consumption between gastric cancer and healthy individuals. We recruited 40 patients with gastric cancer and 40 healthy controls, focusing on differences in habitual dietary intakes along with other details like BMI, age, and gender. The questionnaire was administered in local language and collected the details on their dietary history, detailing food types and quantities along with the nutritive values and energy consumption consumed over the past month.

Results: Among the gastric cancer patients, the mean age was 59 years whereas in healthy participants was 61 years. Majority were males (32; 80%) in the patient group whereas more than 50% of the healthy population were females (23; 57.5%). Mean BMI was 19 in patient group and 23 in healthy population group. When we compared the nutritive values and energy consumption, intake of fruits and vegetables was significantly less in patients with gastric cancer (p value <0.05). Also, the use of maida bread, broiler chicken, beef, ready to cook canned items, refined sugar and vanaspati were significantly high in patients with gastric cancer (p value <0.05).

Conclusion: The findings suggest that gastric cancer patients have different dietary patterns compared to healthy individuals. These differences could be associated with an increased risk of developing gastric cancer. The study highlights that public health initiatives and dietary interventions should focus on educating the population about healthy eating habits to prevent the incidence of gastric cancer.

SOL 039

Clinicopathological spectrum of a rare uterine malignancy – uterine leiomyosarcoma - a tertiary care experience

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Objectives : To Study the Clinicopathological spectrum of Uterine leiomyosarcoma at tertiary care centre.

Materials & Methods : Study population – It's a Retrospective study , where data was collected over the span of 8 years from 2016 – 2024 from the available records in our institute and was compiled and processed. During this period , we have had retrieved 17 cases of Biopsy proven Uterine leiomyosarcoma and their data set was analysed and has been presented.

Results: The mean age of presentation of uterine leiomyosarcoma in our patient population is 48.7yrs and the median is 50yrs. All patients are Multiparous women. About 53% of patients are Post menopausal women. The most common symptom of presentation is Abnormal uterine bleeding which was seen in 9 patients (60%) followed by Excessive white discharge per vaginum in 4 patients (26%) and abdominal pain 2 patients (13.4%). Upfront metastasis was in seen in 8 patients (53%) and all patients have Lung metastasis. One patient had both Lung and bone metastasis.14 patients had Spindle cell type of Leiomyosarcoma and 1 of our patient had Myxoid type of leiomyosarcoma.

Conclusions: Uterine leiomyosarcoma is a rare aggressive uterine neoplasm, more common in multiparous , older patients (>45yrs). Since paucity of data on leiomyosarcoma , we are reporting this study, but we need further larger studies to know the disease characteristics and hence aiding timely management to improve the survival.

SOL 040

Metastatic melanoma to the appendices epiploicae of sigmoid colon - a case report

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Background: Cutaneous melanoma metastasizing to the colon has an incidence of < 1%. Stage IV melanoma has a poor prognosis. But if the metastasis is limited and resectable, it reduces the tumor burden and improves the efficacy of immunotherapy thereby prolonging the survival.

Case presentation: In our case, a patient with cutaneous melanoma with pelvic lymph nodes was planned for bilateral pelvic and inguinal node dissection. However, we detected a PET-missed deposit on the appendices epiploicae of the sigmoid colon. Since it was a limited, resectable disease, we went ahead with the planned procedure along with excision of the deposit. We are possibly presenting the first case in literature where cutaneous melanoma has spread to the appendices epiploicae.

Conclusion: Metastasis of melanoma to Gastrointesitinal tract is rare and to the appendices epiploicae specifically is unheard of in literature. Limited resectable disease should be removed in order for the immunotherapy to be more effective in prolonging both overall survival and disease free survival.

SOL 041

Molecular profiling , study of chemotherapy toxicity , and treatment outcomes in high grade gliomas

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Background: High grade gliomas especially Glioblastoma is the most common and most aggressive form of primary brain tumor in adults and contributes to high social and medical burden as a result of its incurable nature and significant neurologic morbidity. Despite ongoing research, there has not been improvement in survival in glioblastoma.

Aims & Objectives: 1. To study about treatment outcomes in patients with high grade gliomas**. 2.** To study about the molecular biology of high grade gliomas. 3. To study about the adverse effects of chemotherapy

Methods: Patients of high grade gliomas with age group between 18 years and 80years treated in the Department of Medical oncology, M S Ramaiah hospital between January 2020 to December 2023were studied. Patient's course of illness,treatment details, molecular profile of tumors, chemotherapy toxicity were collected from the database in a retrospective manner.

Results: 60 patients were studied with median follow up period of 24months.Most common histopathology was glioblastoma with male predominance in age group of 50-70 years. Frontal lobe was predominant site followed by temporal lobe.70 percent of patients underwent complete surgical resection and rest suboptimal.Surgical resection followed by concurrent chemoradiation and adjuvant chemotherapy by temozolamide showed median overall survival of 15months in glioblastoma and 25months in grade 3 gliomas with chemotherapy induced nausea being the most common toxicity and thrombocytopenia being a rare complication found in 6percent. IDH1 mutation was present in 30percent of patients and MGMT Methylation was present in 35percent of Glioblastoma patients with no survival benefit . 7 patients progressed on taking adjuvant temozolamide and was started on Bevacizumab irinotecan.

Conclusion: There is need for further exploring molecular biology and targeted therapy in grade 4 gliomas to improve survival rate like targeted therapy(zotiraciclib) presently being studied in IDH mutant gliomas.

SOL 042

Angiomyxoma of the vault a rare case report

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BACKGROUND: Aggressive angiomyxoma of vault is a rare entity and only around 350 cases have been documented in the scientific literature so far. Most of the available literature is in form of case reports, case series (max 3-4 patients) or retrospective analysis. Aggressive angiomyxoma (AA) is a vulvovaginal benign, slow-growing and locally invasive tumor. It is mostly benign, but is also notorious for multiple local recurrences as high as 30–72%. Due to the rarity of this tumor, the chances of misdiagnosis is high. Wide local excision with negative margins and long-term follow-up remains the best course of management. We discuss a case of AA of the vulva that was successfully managed by surgical excision followed by hormonal therapy.

Objectives: To highlight the clinical presentation, pathological features and treatment of an aggressive angiomyxoma –vault.

Methods: Type of study – case report

Place of study – VIMS&RC

Clinical details, radiological findings, pathological features results and treatment details were noted for the case, followed by a thorough literature review.

Results: 52y female with no comorbidities presented with pain abdomen since 1 month and with past history of TAH+ BSO for fibroid uterus two years back. Present usg scan and MRI showed a 9.1x8.8 cm a lesion involving superior aspect of the vault extending into the pelvic cavity with no significant lymphadenopathy. The patient then underwent wide local excision. Postoperative biopsy confirmed aggressive angiomyxoma –vault. As late recurrences are known, patient was counselled about the need for long-term follow-up.

Conclusion: Aggressive angiomyxoma (AA) is a vulvovaginal benign, slow-growing and locally invasive mesenchymal tumor originating from myxoid cells of connective tissue with marked tendency for local recurrence, but with a low tendency to metastasize.Wide surgical excision with 1cm margin, is the traditional treatment of choice.

SOL 043

Recurrent malignant melanoma eyelid -a case report and review of literature

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Background: Ocular melanoma, which is much less common than cutaneous melanoma and arises from a variety of tissues, including the uvea, conjunctiva, eyelid, orbit, and lacrimal sac, differs from other forms of melanoma in terms of the characteristics of the patient, the symptoms of the illness, and the prognosis.

Case presentation: A 62-year-old female patient a known case of Malignant Melanoma Eyelid presented to our department with complaints of a multiple nodules under the upper eyelid with history of decreased vision and continuous watering in right eye. She underwent right orbital exenteration with superficial parotidectomy and type III modified radical neck dissection. Pathological staging PT4aN2M0 (Stage IIIC).She was planned for adjuvant radiation therapy and she received 60 Gy in 30 fractions. She completed the treatment uneventfully. Her vision in left eye was maintained post radiation therapy. Patient was referred for an ocular prosthesis post radiation therapy for proper cosmetic outcome. Now Patient is on regular follow up.

Conclusion: Early detection of eyelid malignant melanoma is crucial to preventing potentially deadly outcomes, which have been recorded in multiple cases, especially when the cancer is growing on an existing nevus. We recommend radiation in adjuvant settings to reduce the local recurrence of eyelid melanoma.

SOL 044

Recurrent dermatofibrosarcoma protuberans of the breast: a case report and review of literature

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Background: Dermatofibrosarcoma protuberans (DFSP) is a rare and low-grade sarcoma of fibroblast origin with a tendency to invade and recur locally. The most common sites of origin of DFSP are the head, neck, and extremities. However, DFSP breast has also been reported.

Case presentation: A 34-year-old female presented to our hospital with complaints of a lump in the left breast for 1 month with a history of similar complaints 3 years back which was evaluated and diagnosed as a case of DFSP and treated by surgery. IHC showed that the neoplastic cells were positive for CD34, focally MIC2 and BCL2 positive. and negative for S100, EMA, SMA, DESMIN, and STAT6 with a Ki-67 index of 2%. Morphology and IHC features are suggestive of DFSP. She received Adjuvant RT 50Gy/25 fractions. She is on regular follow up.

Conclusion: DFSP is a rare breast neoplasm and possesses the potential for aggressive local behaviour. It is a radioresponsive disease with excellent local control after conservative surgery in combination with radiation therapy. Radiation therapy should be considered for patients with inoperable disease or recurrent tumours.

SOL 045

Pulmonary mass: a masquerade of metastasis: a case series

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Background: Carcinoma of the uterine cervix remains a leading cause of cancer-related mortality in women, causing 311,365 deaths globally in 2018. Pulmonary metastasis is the most common distant spread in cervical cancer, with an incidence of 4.16 to 7.7%. Despite palliative chemotherapy, metastatic cervical cancer remains highly lethal, with a median survival of 8-13 months. Clinical characteristics of metastatic cervical carcinoma are poorly understood due to its low prevalence and lack of population-based studies.

Objectives: To illustrate the clinical progression & diagnostic challenges of cervical carcinoma with pulmonary metastasis through detailed examination of 2 cases, highlighting the presentation, diagnostic findings and treatment responses.

Materials & methods: this case series presents two instances of cervical carcinoma with lung metastasis. The first case involves a 63-year-old female diagnosed with stage IIIC1r squamous cell carcinoma of the cervix in 2021, treated with concurrent chemoradiotherapy (CTRT) followed by intracavitary brachytherapy (ISBT). In May 2023, she developed symptoms of fatigue and loss of appetite. HRCT of the thorax revealed a mass in the left perihilar region with mediastinal infiltration, left upper lobe collapse, and pleural and pericardial effusion. The second case is a 70-year-old female diagnosed with stage IIIC1r squamous cell carcinoma in 2019, also treated with concurrent CTRT followed by ISBT. In January 2024, she presented with a dry cough. CT Thorax showed a soft tissue mass in the left upper lobe with enlarged lymph nodes. PET CT scan confirmed pulmonary metastasis without local recurrence.

Results: both received palliative chemotherapy with Paclitaxel and Carboplatin. The first case could tolerate only one cycle and expired after one month due to disease and chemotherapy-related complications. The second case received three cycles and response assessment is awaited.

Conclusions: This case series highlights the diagnostic challenges of identifying advanced cervical cancer with lung metastasis, often initially mistaken for pneumonia. The rarity of this metastatic pattern underscores the need for thorough diagnostics and effective screening for early detection.

SOL 046

Efficacy of T-DM1 in HER2-positive metastatic breast cancer: a real-world retrospective study

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Background: HER2 is expressed in 15-20% of breast cancers. Human epidermal growth factor receptor 2 (HER2)-targeted therapies like Trastuzumab have improved survival, but its monotherapy is effective in only 25% of patients, requiring combination with chemotherapy for better results despite increased toxicity. For advanced or metastatic disease, resistance to Trastuzumab necessitates second-line treatments. Ado-trastuzumab emtansine (T-DM1), combining Trastuzumab's targeting properties with the cytotoxic agent DM1, was approved by the FDA based on the EMILIA trial.

Materials and Methods: This retrospective study evaluated 42 HER2-positive metastatic breast cancer patients treated with T-DM1 from April 2021 to May 2023.

Results: The cohort's median follow-up was 9.3 months, with a median progression-free survival (PFS) of 10.9 months (95% CI: 8.7 to 13). The analysis showed no significant impact of hormone receptor status on PFS ($p = 0.923$) and no significant difference in PFS between HER2 2+ and FISH-positive patients (10.9 months) and HER2 3+ patients (9.4 months) ($p = 0.712$). However, patients without brain metastases had a significantly longer median PFS (11.2 months) compared to those with brain metastases (5.5 months, $p = 0.003$). T-DM1 was well tolerated except very few experiencing grade3/4 toxicities. These findings confirm T-DM1's efficacy in real-world settings, particularly highlighting the poorer prognosis for patients with brain metastases.

SOL 047

Unusual coexistence of breast carcinoma and trichilemmal tumour

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Background: Simultaneous occurrence of trichilemmal tumours and breast carcinoma within the same patient is rare. We present a case of a 56-year-old woman diagnosed with both trichilemmal tumour on scalp and carcinoma of the right breast.

Case description: The patient presented with a right breast lump since 3 months and a asymptomatic scalp swelling since childhood .

PET CT scan showed FDG avid malignant looking lesion seen in outer quadrant of right breast, right level I, II,III axillary lymphademopathy and a large malignant looking solid cystic lesion involving the overlying skin of the head and closely abutting the underlying muscles in left side of nape of neck.

USG guided trucut biopsy of right breast lump showed features suggestive of invasive mammary carcinoma HER2neu enriched molecular subtype. Biopsy of scalp swelling was also done reported as malignant trichilemmal tumour. Patient was started on Neo-adjuvant chemotherapy Doxorubicin and Cyclophosphamide after receiving three cycles of chemotherapy there was reduction in size of the breast lump and axillary lymph nodes but increase in size of scalp lesion associated with pain .Patient underwent wide local excision of trichilemmal tumour, after 3 weeks of excision patient was continued on chemotherapy for breast cancer.

Conclusion: this case highlights the diagnostic and therapeutic challenges associated with presence of two distinct neoplasms , underscores the importance of multidisciplinary management.

SOL 048

Unusual presentations of ewing sarcoma - case report of three cases

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Background: Ewing sarcoma (ES) is an aggressive malignancy which most commonly involves flat bones of axial skeleton and diaphysis of long bones, only 10-20% of cases originate from extra-skeletal sites. We report here three cases of ES with atypical presentation and diagnostic dilemma.

Case presentation:

1- Renal ES with multiple bone metastases -19yr/F, presented with left loin mass, pain and haematuria. Radiological and pathological diagnosis confirmed diagnosis of Left Kidney ES with FUS-ERG fusion. Progressed on VAC/IE and started on salvage chemotherapy. After 2 cycles, despite aggressive chemotherapy, patient succumbed to complications.

2 - Pulmonary Ewing Sarcoma - 40yr /M, presented with cough and dyspnoea. PET CT showed lung mass with pulmonary nodules. Lung biopsy and IHC confirmed ES. Patient received first cycle of Vincristine and Actinomycin-D. After first cycle, patient succumbed to complications.

3- Extra-skeletal ES of popliteal fossa - 25 yr/F , with pain in left popliteal fossa and mass underwent wide local excision outside. Post op HPE and IHC confirmed ES. After, post op RT and VAC/IE, CR seen. After 4 years, developed bone metastasis now on palliative chemotherapy.

Conclusion: Although most common in long bones or pelvis, ES is exceptionally rare in locations such as kidney and lung with only a handful of cases reported. Pulmonary and renal ES , have shown dismal prognosis despite aggressive treatment, stressing the need for early recognition and diagnosis for better outcomes.

SOL 049

Recurrence of scalp angiosarcoma in a 63-year-old male: a case report and literature review

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Background: Scalp angiosarcoma (SA) is rare, accounting for <1% of soft tissue sarcomas, with a high degree of malignancy, a high recurrence rate and a poor prognosis. The best treatment strategy is uncertain. Here we report a case of Recurrent Angiosarcoma Skull.

Case presentation: A 63-year-old girl presented to our hospital in 2019 with a diagnosis of Angiosarcoma Skull. He underwent Wide Local Excision followed by Adjuvant Radiation. He was on regular follow-up. After 2 years, he developed a recurrence in the skull and neck nodes for which he underwent Surgical Excision and Neck Dissection. Post operative Histopathology suggestive of Intra parotid lymph node metastasis. He received Adjuvant Radiation of 60Gy to Primary and Neck nodes by IMRT. Now patient is on Regular follow-up with no evidence of recurrence.

Conclusion: Primary angiosarcoma of the skull is a rare tumor with less than 20 cases reported worldwide till date. The treatment should include complete surgical excision with a wide bony margin followed by adjuvant radiotherapy. However, these patients should be followed up with repeated scans yearly to rule out locoregional as well as distant recurrence.

SOL 050

Oral metronomic chemotherapy in unresectable locally advanced or metastatic head and neck cancers

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Background: Metronomic chemotherapy (MC) is an emerging therapeutic option in patients with metastatic and locally advanced head and neck squamous cell carcinoma (HNSCC) patients, who have progressed or are intolerable to Conventional platinum based chemotherapy. The response to platinum based chemotherapy is minimal with worsened quality of life (QOL). Recently targeted and immunotherapies have been approved in these subgroups, but in resource limited settings MC could be an effective treatment option.

Objective: The aim of the study was to assess the effect of oral MC on changes in quality of life (QOL) in advanced/recurrent HNSCC patients.

Methods: Patients with advanced, metastatic, and recurrent HNSCC who presented to the Department of Medical Oncology, Government Kilpauk Medical College, Chennai over a span of 1 year were included in the study. QOL assessed with the European organization for research and treatment of cancer (EORTC) QLQ-C30 and QLQ-H&N 35 questionnaires.

Results: In this study, 54 patients were included, while 50 % patients had grade 3 or more pain at the time of enrolment, only 5 % patients had grade 3 or more pain at the end of 6 months. Mean QLQ-C 30 score at the time of presentation was 68.4. With oral MC, there was a steady increase in QOL score QLQ-C30; 75.35 at 2 months, 81.26 at 4 months, and 85.38 at the end of 6 months. Mean QLQ-H&N 35 score at the time of presentation was 62.50. QLQ-H&N score steadily increases with oral MC; 71.16 at 2 months, 75.43 at 4 months, and 80.69 at the end of 6 months. In subgroup analysis, both QLQ-C30 and QLQ-H&N 35 significantly correlated with disease progression.

Conclusion: The use of oral metronomic therapy with methotrexate, erlotinib and celecoxib significantly improves the QOL and improves pain control in patients with advanced/recurrent HNSCC.

SOL 051

Retrospective study on left-sided breast radiotherapy: dosimetric results and its correlation with irradiation techniques and radiation dose

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Objectives: In breast radiotherapy, the proximity of the target to sensitive structures together with the uncertainty introduced by respiratory movement, make this treatment one of the most studied to increase its effectiveness. This retrospective study aims to highlight the dosimetric differences of different RT Techniques and RT doses in patients receiving left-sided breast irradiation.

Methods: A total of 142 left breast carcinoma patients receiving either whole-breast irradiation or chest wall irradiation were enrolled in this study. The dosimetric parameters of the, heart, left lung and right breast were evaluated and compared, and possible correlations were studied.

Results: Maximum number of patients are stage III (N-62). 93 patients underwent postmastectomy radiotherapy and 49 patients with whole breast radiotherapy. 3DCRT was the predominant technique used. 50Gy in 25 fractions (n-74) and 40Gy in 15fractions (n-70) was the radiation dose regimens. Heart mean dose in Conventional fractionation is 7.8Gy and Hypofractionation EQD2 is 6.6Gy (p-<0.001). On comparing with 3DCRT, IMRT and VMAT its 7, 8.3 and 7.4Gy respectively (p-0.002). With regards to Lung mean dose its 13Gy with Conventional Fractionation and 11.3Gy (EQD2) with Hypofractionation (p-0.004) and v20 is 27.5 % and 22.5 % respectively among Conventional and Hypofractionation. On comparing with 3DCRT, IMRT and VMAT its 24.8% (p-0.998). C/L breast mean dose in 3DCRT was 0.8Gy whereas its 5.3Gy and 4Gy respectively in IMRT and VMAT which is statistically significant (p-0.05)

Conclusion: Our results suggest that Hypofractionation is non-inferior to conventional fractionation in left breast radiotherapy in terms of heart and lung dosimetry. It also suggests that heart mean dose and C/L breast dose is minimal in 3DCRT compared to IMRT and VMAT techniques.

SOL 052

Is neutrophil to lymphocyte ratio (NLR) an adverse prognostic factor in head and neck cancer? A retrospective analysis

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Background: Head and neck cancer in India shows varied response to treatment. In our centre, as high as 75% patients had residual disease or progression post definitive treatment. This is in part due to presentation at an advanced stage. Neutrophil to lymphocyte ratio (NLR) is emerging as a prognostic factor in head and neck cancer. The higher the NLR, the worse is the expected prognosis.

Objective: This study aims to study the relationship of NLR with the survival in head and neck cancer patients.

Results: We studied 104 patients, 36 patients (34.6%) were of carcinoma tongue. 54 patients (51.9%) had moderately differentiated squamous cell carcinoma. 72 patients (69.2%) had node positive disease at presentation. NLR cut off was taken at 3 and 38 patients (36.5%) had NLR more than or equal to 3. The median survival in this group was 13 months vs 15 months in NLR less than 3 (p=0.842). Tobacco chewing and nodal status were significant prognostic factors affecting the survival outcome.

Conclusion: Our study showed no significant difference in survival or patients with a higher NLR. However, this is a small volume, single centre study with an arbitrary NLR cut-off. Further studies are required to shed light on the use of NLR as a prognostic factor in head and neck cancer.

SOL 053

Fam-Trastuzumab Deruxtecan-NXKI (T-DXD) in metastatic HER2neu positive carcinoma breast with active brain disease- an early experience.

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Background: Her2neu-positive breast cancers have higher incidences of brain metastasis. Tucantinib and T-Dxd have shown better intracranial responses as compared to other anti-Her2neu therapy.

Objectives: To analyse the efficacy and safety profile of (T-DXd) in patients with brain metastasis who have progressed after multiple lines of anti-HER2 and chemotherapy.

Material & Methods: This is a retrospective analysis of patients with active brain metastasis in Her2neu-positive carcinoma breast treated with T-DXd from June 2022-May 2024 at a single center.

Results: 4 patients with Her2neu 3+ were identified. All had progressed after 2-3 lines of treatment, which included chemotherapy with trastuzumab, pertuzumab, TDM-1, and lapatinib. 2 patients had disease progression after cranial irradiation, while 2 did not receive any radiation. All patients had intracranial partial response (PR) on T-DXd. 2 patients are currently on T-DXd with ongoing response at 15, 4 months. The third patient received 2 cycles with T-DXd with very good intracranial response, and stopped treatment due to logistics, and continues to be in PR at 4 months inspite of no cranial radiotherapy. The fourth patient received 3 cycles and achieved PR in the brain, but stopped treatment, and then progressed after further 4 months. Adverse events noted were mainly Grade 1/2 neutropenia, anemia and fatigue. No cases of interstitial lung diseases were noted.

Conclusions: Our study showed T-DXd to be very effective in patients with active brain metastasis in her2neu positive relapsed disease, and should be the preferred upfront option, if financially feasible.

SOL 054

Predictive factors for recurrence in oral cavity carcinomas

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Background: Oral cavity cancers are among the most common cancers in India. Despite advances in treatment options, survival rates following treatment completion have not improved significantly with a 5 year survival rate of 50% and recurrence rate of 30% to 40%.

Objective: This study aims to establish specific epidemiological and pathological factors responsible for recurrence after treatment completion in oral cavity malignancies.

Methods: Retrospective analysis of the data of 100 patients treated for biopsy proven cancers of the oral cavity was done 1 years after treatment completion. Factors such as age, sex, lymphovascular invasion, peri neural invasion , extra nodal invasion, depth of invasion , and pathological margin status were compared between patients who presented with recurrence and those who did not. Statistical significance was set at $p<0.05$.

Results: Of the 100 patients, 30% patients developed a recurrent disease within 1 year. The mean age of the study population was 43.3 years , and males accounted for 91.4% of the included patients. Ipsilateral buccal mucosa was the most common site of disease recurrence. Neck node metastasis, extra nodal extension , and margin of resection< 5mm were significantly related to the recurrence of disease. However lymphovascular invasion, perineurial invasion and depth of invasion > 10mm did not show statistically significant association.

Conclusion: Neck nodal metastasis, extra nodal extension , <5mm margin of resection were significant predictive factors for local recurrence in oral cavity cancers.

SOL 055

First line osimertinib in treatment of stage IV NSCLC with common EGFR mutations: a single center experience

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Introduction: Osimertinib, an oral 3rd generation TKI is the standard of care in the treatment of stage IV NSCLC with common EGFR mutations(exon 19 deletion and exon 21 L858R). Data from India population is limited.

Objectives: To analyze the survival outcomes and toxicity profile of first line osimertinib in EGFR mutated stage IV NSCLC at a single center.

Material and methods: This is a retrospective analysis of patients with advanced NSCLCs with common EGFR mutations who received osimertinib as single agent first line therapy between Jan 2018-Jan 2024.

Results: 32 patients were identified with 16(50%) females and 16(50%) males. 31 had adenocarcinoma and 1 adeno-squamous histology. 21(65%) patients had EGFR exon 19 deletion and 11(34%) had exon 21 L858R mutation. At presentation, 16(50%) had brain metastasis, 5 patients received cranial radiation (4 received SRT and 1 WBRT) at diagnosis. At a median follow up of 24 months, the mPFS was 19 months(95% CI, 13.61-24.38) and mOS was not reached. In patients with brain metastasis, mPFS and mOS were 15 months and 33 months respectively. mPFS in patients with exon 19 deletion and exon 21 L858R were 19 months and 17 months respectively. Adverse events reported were mainly Grade 1 or 2 and included diarrhea and skin rash.

Discussion: Our study showed osimertinib as an effective agent in our population including patients with brain metastasis with results similar to landmark trails. Newer combination regimen of Osimertinib with chemotherapy/amivantamab in first line would need to be evaluated in our patients.

SOL 056

A case series of primary synovial sarcoma of lung

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Background: Synovial sarcoma (SS) is a malignant soft tissue tumor that affects mostly young adults and can arise at any anatomic site. It accounts for 5 - 10% of all soft tissue sarcomas and lung being the most common site of metastasis. Primary lung SS is extremely rare accounting for <0.5% of all lung tumors. Less than hundred cases of primary synovial sarcoma of the lung (PSS) have been reported. Thus very limited medical literature is available regarding the clinical presentation and treatment outcomes of PSSL.

Objectives : To highlight the clinical presentation, pathological features, immunohistochemistry and treatment outcomes of a series of three cases of PSSL, we encountered from February to April 2024.

Methods: Type of study – case series, Place of study – VIMS&RC, Clinical details, radiological findings, pathological features, immunohistochemistry results and treatment details were noted for the three PSSL cases, who presented to our medical oncology opd from February to April 2024.

Results: The mean age of presentation was 70 years and male to female ratio was 2:1. Chest pain was the most common presenting complaint. All the three had an ECOG of 2. Tumor size was more than 5 cm in all the cases. The characteristic biopsy finding was round to oval and short spindled cells. IHC was strong positive for TLE 1 in all the three cases. A final diagnosis of biphasic synovial sarcoma was made in all the three cases. Surgery was offered to all the three cases but only one was deemed fit for surgery. One patient received ifosfamide/epirubicin based chemotherapy and one is on best supportive care owing to elderly age and multiple comorbidities.

Conclusion: PSSL is a rare tumor of the lung and has a poor prognosis but is being increasingly diagnosed as a distinct clinical entity due to wider utilization of immunohistochemical and cytogenetic analysis. The diagnosis requires clinic-pathologic and immunohistochemical investigations to exclude alternative primary lung tumors and metastatic sarcoma.

SOL 057

Intra-Pericardial Chemotherapy for Pericardial Effusion in Soft Tissue Sarcoma: A Case Report

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Abstract: Pericardial effusion secondary to malignancy is a critical complication that can significantly impact patient outcomes. This case report details the management of a 42-year-old female with a known history of soft tissue sarcoma of the lung, who developed pericardial effusion as a complication of her underlying malignancy. Initially stabilized with a pericardial window and pericardiocentesis, the patient underwent intra-pericardial chemotherapy with Bleomycin, administered once daily for five days. This intervention resulted in a significant reduction in the pericardial effusion, allowing for the successful closure of the pericardial window. The patient continues to receive palliative chemotherapy for her primary disease. This case highlights the efficacy of intra-pericardial chemotherapy in managing pericardial effusion secondary to soft tissue sarcoma, providing a potential therapeutic option for similar cases.

SOL 058

A New Hope for Metastatic RCC

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Background: Metastasis remains the major cause of cancer-related death in patients with cancer. Systemic therapy is the backbone for treating metastatic disease, and the intent of treating metastatic disease is mostly palliative. Chemotherapy has been used for ages with quite unsatisfactory outcomes in this setting. In recent years, immune checkpoint inhibitors have become an important tool in the therapeutic strategy for metastatic renal cell carcinoma (RCC).

Case Series: Case 1.A 57-year-old woman was diagnosed with left-sided renal cell carcinoma and underwent a left radical nephrectomy in August 2018. She presented with multiple lung metastases in 2021 and was started on Tab Pazopanib 800 mg OD. She developed grade 3 skin reactions and stomatitis, so the dose was reduced by 50%. After 7 months, she had progressive disease with new lesions in the liver, lung, and mediastinal lymph nodes. Subsequently, she was started on Inj Pembrolizumab as a second-line treatment along with Tab Axitinib. However, due to intolerance to the oral TKI, Pembrolizumab monotherapy was continued. Treatment response was assessed periodically with whole-body PET-CT. After 8 cycles of Pembrolizumab, she achieved complete remission. She was continued on maintenance therapy with Pembrolizumab for a total of 35 cycles.

Case 2. A 65 year old man who was diagnosed with left RCC stage IV with multiple bone mets was started on Pembrolizumab and axitinib patient after 6 cycles showed complete response and is on maintenance Pembrolizumab

Conclusion: Curing metastatic renal cell carcinoma with a high metastatic burden is quite challenging. The appropriate use of immune checkpoint inhibitors in this patient has made it possible to achieve and maintain complete remission

SOL 059

Vulvovaginal Melanoma – A case report

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Introduction: The incidence of Vulvovaginal melanomas is around 1-2%. Of all the vulvar malignancies, melanoma accounts for only 5% with a 5-year survival varying from 10% to 63%. The primary management of melanoma is Surgical Excision. But it depends on anatomical locations and the ability to attain negative margins. In inoperable cases, Definitive External Beam Radiotherapy can be offered for local control.

Case Report: A 45-year-old female, presented with complaints of foreign body sensation in the vulval region for 2 months. Gynaecological examination showed a dark pigmented lesion in the Right lateral wall of vagina extending up to Right labia minora. PET-CT showed a metabolically active lesion measuring approximately 2.0x3.0x4.0cm craniocaudally (SUV: 10.1) with enlarged right external iliac and inguinal lymph nodes. Histopathology and Immunohistochemistry were suggestive of Malignant Melanoma. Considering the morbidity associated with pelvic exenteration, patient was planned for EBRT.

Patient received EBRT with a hypo-fractionated dose of 4500cGy/15 fractions over 3 weeks with Concurrent Temozolomide Chemotherapy in November 2022, followed by 12 cycles of Adjuvant Temozolomide. Response assessment PET-CT done in May 2023 showed complete locoregional response. Patient developed solitary liver lesion in October 2023 for which surgical resection was done in outside hospital.

Discussion: Melanoma is considered as radio responsive tumour with a low alpha/beta value of 2.5 and has better response with Hypofractionated RT. Hence hypofractionated EBRT can be considered as alternate option in inoperable Vulvovaginal melanomas.

SOL 060

Case series on extragonadal germ cell tumors

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Background: Germ cell tumors (GCTs) are classified as extragonadal (EGGCTs) when there is no evidence of a primary tumor in the testes or ovaries, either by clinical examination /radiological imaging. These tumors account for 2-3% of all GCTs. The most common sites for EGGCTs are the mediastinum and retroperitoneum in adults, and the sacrococcygeal region and central nervous system (CNS) in children. Histologically, GCTs are divided into seminomatous GCTs (SGCT) and non-seminomatous GCTs (NSGCT).

Aims and Objectives: This case series aims to provide an overview of the clinical presentation, diagnostic workup, therapeutic interventions, and outcomes of patients with EGGCTs treated at our institution over the past 18 months.

Methods: Type of Study: Case series **Period of Study**: 2023 – 2024 **Place of Study:** VIMS and RC

Results:A total of 7 patients were evaluated, including 2 children and 5 adults, with a significant male preponderance (M: F = 6:1). The mean age of presentation was 17 years (range: 9-25 years). The most common presenting complaints were abdominal pain and headache. Histological types included germinoma (2 patients), teratoma (1 patient), seminoma (1 patient, possibly mixed GCT), and NSGCT (3 patients). Immunohistochemistry (IHC) was positive for SALL4 in 4 patients. Alpha-fetoprotein (AFP) levels were significantly increased in all patients with NSGCT. Metastatic disease was observed in one patient at the time of diagnosis.Treatment involved multimodal approaches: Surgical Excision: Performed on 3 patients. Inoperable Cases: 2 patients were deemed inoperable. Chemotherapy: Administered to all patients, primarily using a regimen based on etoposide and platinum agents (with or without bleomycin). One patient had progressive refractory disease despite treatment. Radiation : received by 2 patients

Conclusion: EGGCTs are relatively rare and present with a variety of clinical manifestations, making accurate diagnosis challenging. A high index of suspicion is necessary for diagnosis, and accurate histopathological evaluation is crucial for determining the appropriate treatment and prognosis. This case series underscores the importance of a multidisciplinary approach in the management of EGGCTs to achieve optimal outcomes.

SOL 061

The Spectrum of malignancies in Adolescents and Young Adults- Real world data from a tertiary cancer centre in South India

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Introduction: The cancer types affecting adolescents and young adults is unique and distinct when compared to pediatric and older population. Cancers associated with germline mutations affect only a minority of this age group and they seem to arise sporadically in most of them with negative family history. Fertility, sexual function, longterm consequences, psychosocial and behavior related issues are more commonly faced while treating this age group.

Methods: We retrospectively collected data of patients of age group 15-39years who reported to our Oncology OPD from January 1st 2022 to December 31st 2022 and studied demographics and incidence of malignancies in those patients.

Results: In 2022, 2427 patients registered in oncology opd out of which 554 patients belong to 15-39 year age group. Out of 554, 340 patients were diagnosed of malignancies. 178 (52%) were females and 162 (48%) were males. Top 5 malignancies were Head and Neck (15.3%), breast (11.2%), thyroid (7.6%), lymphomas (7.3%) and soft tissue sarcomas (5.3%). Further age group wise distribution of cancers noted. Most common cancers among 15-19years, 20-24years, 25-29 years, 30-34 years and 35-39 years were Lymphomas, Germ cell tumors, Thyroid, Breast and Head & Neck respectively.

Conclusion: Identifying age specific issues and recommending appropriate interventions is important to improve clinical outcomes in AYA population. As incidence of cancers is increasing in this group, it is necessary to educate them about risk factors, cancer prevention strategies, self examination, screening, benefits of early diagnosis and treatment.

SOL 062

Real word data on the use of Triple oral metronomic chemotherapy (OMCT) in locally advanced or metastatic esophageal squamous cell carcinoma (SCC)

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Background: Esophageal SCC treated with palliative intent have dismal survival outcomes especially beyond first-line systemic therapy. Triple-OMCT is an efficacious and cost-effective treatment option in locally advanced Head-Neck SCC.

Objectives: To explore the safety and efficacy of Triple-OMCT in esophageal SCC.

Methods: This was a retrospective observational study conducted at our institute between August'23 and February'24. Patients with esophageal SCC treated with palliative intent and given Triple-OMCT (Methotrexate, Erlotinib, Celecoxib) were included in the analysis.

Results: 27 patients were included. Median age was 59 years (IQR,52-62). 55.6%(n=15) patients were females, 92.6%(n=25) patients had ECOG-PS 0-2, and 77.8%(n=21) patients had metastatic disease. 55.6%(n=15) patients received immunotherapy with OMCT, and 25.9%(n=7) had PDL-1 CPS scores>10. Median lines of treatment prior to OMCT initiation was 1(IQR,1-2). Clinical response was obtained in 37.0%(n=10) patients. Amongst radiological response evaluable patients(n=15), 20%(n=3/15) had partial-response, 33%(n=5/15) had stable-disease, and 47%(n=7/15) had progressive-disease. Objective-response-rate was 20% and disease-control-rate was 53%. Median follow-up was 31.0months (95%CI,19.9-42.2) and median PFS was 2.9months (95%CI,2.2-3.7). Patients with a clinical response [mPFS 7.1months (95%CI,3.5-10.7) versus 2.4months (95%CI,1.4-3.5), p=<0.001] and those with PDL-1 CPS scores >10 [mPFS 6.2months (95%CI,1.3-11.0) versus 2.4months (95%CI,1.0-3.8), p=0.043] had better survival outcomes. Grade 3/4 toxicities were seen in 22.0%(n=6) and none discontinued treatment.

Conclusions: Triple OMCT±immunotherapy is a safe and active regimen in patients with esophageal SCC and warrants exploration in larger clinical trials.

SOL 063

Pressurized Intraperitoneal aerosol chemotherapy (PIPAC): A case report

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Background: PIPAC is an intraperitoneal chemotherapy procedure. The drug is delivered as an aerosol with optimal drug distribution to the peritoneal surface at high pressure with minimal systemic toxicities. It can be used in palliative as well as neoadjuvant settings in peritoneal carcinomatosis.

Objective: To determine the feasibility of PIPAC in a case of advanced ovarian carcinoma at a tertiary centre.

Methodology:A 62-year-old lady, known case of ovarian carcinoma stage IIIC, received four cycles neo-adjuvant chemotherapy and showed poor response on imaging, hence completed two more cycles. After six cycles chemotherapy she underwent laparotomy, in view of extensive disease, it was deemed inoperable. After tumour board discussion, the patient was planned on second line chemotherapy and for palliative PIPAC with cisplatin and doxorubicin. She underwent PIPAC and the chemotherapy drugs used were cisplatin and doxorubicin at 12 mmHg CO2 pneumoperitoneum over 30 minutes at a temperature of 37*C. She tolerated the procedure well and had symptomatic improvement. She received four cycles of Gemcitabine after which she had disease progression, hence further PIPAC was not contemplated.

Results:PIPAC has provided partial symptomatic response with no undue morbidity.

Conclusions:1.PIPAC can be offered for peritoneal carcinomatosis for selected patients for symptomatic relief. 2.PIPAC is safe and feasible in tertiary centres.

SOL 064

Clinical and Molecular Prognostic Markers of Survival in Metastatic Gastric Cancer: A Single Institute Observational Study

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Background: Gastric cancer is the fifth most common cancer and the third cause of cancer death worldwide. The clinical outcomes of patient affected by gastric cancer are not encouraging. The 5 years survival rate is < 30% in locally advanced and 6% in metastatic disease. Patients of same TNM stage often shows very differential clinical outcomes, which implies there must be other factors responsible for those differences. A deep understanding of clinical and molecular factors of metastatic gastric cancer may help to identify prognostic and therapeutic biomarkers, which in turn helps in the management of patients.

Aim: This study was aimed at prediction of prognostic and therapeutic value of various clinical and molecular factors with the help of survival outcomes.

Study Design and Methods: This is a retrospective and descriptive single-center study. Baseline demographics, co-morbidities, location of tumor, histology, site & number of metastasis, molecular profile (Her2,MSI and PDL1) and treatment patterns of patients with metastatic gastric cancer between January 2020 to May 2023 were analysed. Univariable regression examined factors associated with the better survival outcomes.

Results: This study analysed data of 105 patients of whom 79 (75.24%) were men, and 26 (24.76%) were women. Median OS is 7.9 months (95%CI 5.1-9.5). The factors that determined survival were age, performance status, haemoglobin, albumin, Ca19.9 levels, histological type, number of metastatic sites, Her 2 neu and MSI status. The histological subtype, Her2 neu status, no of metastatic sites and trastuzumab usage were determined as independent prognostic factors that affect survival after performing multivariate analysis.

Conclusion: several studies have defined numerous prognostic factors for gastric cancer. In concordance with the literature, this study also showed the important factors in terms of prognosis which includes age, haemoglobin, albumin, number of metastatic sites and Her 2 neu status.

SOL 065

Real world experience with safety of dose dense AC-Paclitaxel

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Background: Treatment of breast cancer with dose-dense Adriamycin, Cyclophosphamide and Paclitaxel (AC-P) increases survival rates. However, it is commonly associated with adverse events (AEs).

Objective: To evaluate side effects, dose reduction and treatment delays associated with AC-paclitaxel treatment.

Methods: A retrospective analysis of breast cancer patients receiving dose-dense AC-paclitaxel either as NACT or adjuvant from a single centre between June 2021 and December 2023 was included in the analysis. Toxicity was assessed using CTCAE version 5. Routine G-CSF prophylaxis was administered during the AC phase.

Results: Of the 149 patients analysed, median age was 49 years (range 23-70).49.7% (n=74) had toxicity. Grade 3 or 4 neutropenia accounted for 2% (n=3) after administration of G-CSF with a mean of 3 doses, per AC cycle. A total of 25.5 % (n=38) of the patients received G-CSF during taxane treatment with a mean of 1 dose. 4.7% (n=7) had grade 3 mucositis, 4% had grade 3 or 4 neuropathy, 3.4% had CINV and 2% had constipation. 5.3% (n=8) had febrile neutropenia, 1.3% (n= 2) had grade 3 anemia and received blood transfusion. Toxicity management included dose reduction of AC-paclitaxel in 12.08% (n=18), and switching to docetaxel from paclitaxel in 3 patients due to neuropathy. All could complete 8 cycles of chemotherapy as planned, although 8% (n=12) had treatment delays .

Conclusion: The retrospective analysis shows that dose-dense AC-Paclitaxel for breast cancer is well tolerated and safe. G-CSF support is needed to maintain the dose density in most patients especially during the AC courses.

SOL 066

Clinical Profile and Treatment Outcomes of elderly vs non elderly patients with Carcinoma Gallbladder : A single centre experience

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Introduction: Gallbladder cancer (Ca GB) is the most common malignant cancer of the biliary tract. This is a disease of the elderly population with median age is 73 years. Elderly people may have multiple comorbidities and may not be eligible for aggressive treatment.

Aims & Objectives: To study the clinical characteristics and treatment outcomes in patients with Carcinoma Gallbladder and compare this between elderly and non-elderly patients.

Materials and Methods: Gall bladder cancer patients elderly (>60years); non-elderly (<60 years) from a single institution were included in this prospective observational study. Demographic characteristics, pathology, stage, treatment details and clinical outcome were studied. Progression free survival (PFS) and Overall survival (OS) were compared between the two groups after matching with stage.

Results: Out of 40 patients, 18 Were elderly. Number of patients with stage I, II, III or IV in the elderly vs non elderly groups were 1 vs 1, 2 vs 2, 1 vs 1 & 14 vs 17 respectively. PFS in nonmetastatic elderly vs non-elderly patients was 8 months vs 11 months respectively whereas PFS in metastatic elderly vs non-elderly patients was 3.9 months vs 5.7 months (P=0.9) respectively. OS in metastatic elderly vs non-elderly was 8.3 months vs 9.7 months respectively. ECOG PS had significant effect on OS in metastatic (PS1 had 12.5 months; PS - 2 had 5 months; P=0.005). Her2 neu positivity was 15% (6/40) with no relation with age or stage. This can be targeted for better survival.

Conclusion: Treatment should still be provided to elderly Ca GB patients to improve the survival.

SOL 067

A Case Report of HER2 Positive Metastatic Gastric Adenocarcinoma: Efficacy of Fourth-Line Therapy with Trastuzumab Deruxtecan

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Background: Metastatic gastric adenocarcinoma with HER2 positivity is a challenging malignancy, often requiring multiple lines of therapy. This case report highlights the clinical course and management of a patient with metastatic gastric cancer treated with fourth-line therapy, Trastuzumab Deruxtecan.

Objective: To evaluate the use of trastuzumab deruxtecan as a possible therapy in patients with HER2 positive gastric cancer

Methods: This patient was evaluated for clinical response when using trastuzumab deruxtecan as a fourth line therapy after progressing on 3 previous lines of therapy while being continued on trastuzumab

Results: The patient showed significant clinical improvement, with reduced tumour markers and stabilized metastatic sites on imaging

Conclusion: Trastuzumab Deruxtecan is a promising therapy for patients with HER2-positive metastatic gastric cancer, offering hope for improved outcomes in this challenging disease. Due to the low incidence of HER2 positive gastric cancer, the data availability is limited for such patients. In this particular case, the patient has had progression after response in mid cycle check ups while on chemotherapy along with Trastuzumab

SOL 068

Survival and prognostic factors in anal canal cancer

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Background: The number of anal canal cancer patients has continually increased over the past 20 years. According to the existing literature, Human immunodeficiency virus (HIV), female gender, smoking, chronic immunosuppression, and Crohn's disease are some risk factors for anal cancer. Concurrent Chemoradiotherapy (CCRT) has become the standard therapy for Squamous Cell Carcinoma in anal cancer, with significantly improved overall survival (OS) rate.

Objectives: We set to evaluate the OS and DFS (Disease free survival) based on age, gender, HIV status, stage and histological type in anal cancer patients after chemo radiation therapy.

Methods: 46 anal cancer patients treated with CCRT were identified after retrospectively analyzing the medical records from 2011 to 2021.

Results: Age <55yrs had better OS and DFS than patients aged >55 years (p=0.438 vs. 0.424). Females had better OS and DFS than males (p=0.913 vs. 0.93). HIV negative patients had better OS and DFS compared to HIV positive patients (p=0.363 vs. 0.392). Squamous cell carcinoma showed better OS and DFS (p=0.81 vs. 0.90) than adenocarcinoma and other histologies. Tumor stage comparison showed early stages have better OS and DFS (T1>T2>T3>T4) (p=0.835 to 0.879). Node negative patients had better outcomes than node positive patients (p=0.97 vs. 0.114). However,there was no statastically significant difference in the mean OS or DFS of categories of any of the variables (Gender, Sex, HIV status, Stage, nodal and histology type). The total OS was 89.1% and DFS was 84.7% at 12 years post chemoradiotherapy.

Conclusion: Anal canal cancer patients have better long-term OS and DFS with CCRT irrespective of age, gender, histology, HIV status, TNM staging. Hence CCRT should continue to be the standard of care in these patients which has excellent outcomes.

SOL 069

Neurological conundrums in management of carcinoma cervix

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Background: Patients with Carcinoma(Ca.) Cervix rarely experience serious neurological events. The incidence of Brain Metastasis(BM) in Ca.Cervix is low (0.45-1.18 %). Concurrent platinum chemotherapy(CT) is an important component in the management of Ca.Cervix. Thromboembolic events are rare life-threatening complications associated with CT. Ca.Cervix is a malignancy of the developing nations, where neurological tapeworm infestations are also common (6.95%). Meningiomas account for 36.4% of all Primary brain tumours, mainly in the fifth-sixth decades with female: male 2:1.

Objectives: Uncommon etiologies for Neurological presentations and their impact on management of Ca. Cervix have been elaborated in the current series**.**

Materials & Methods: Five Ca.Cervix patients on Concurrent Chemoradiotherapy(CCRT) presented with Headache/Seizure and limb weakness during CTRT. Steroids and Anticonvulsants were commenced, and Magnetic Resonance Imaging brain was obtained with initial suspicion of BM. 3/5 patients were diagnosed with Cerebral cortical venous thrombosis (CVT) ; 1/5 patients had meningioma along with left upper limb VT, the other patient had Neurocysticercosis(NCC).

Results: 2/4 thrombotic patients progressed to massive venous infarcts and expired despite neurosurgical intervention. Two other patients were managed with Levetiracetam and heparin. Meningioma was decided for close follow-up. The NCC patient received anticonvulsants and anti-Edema measures. All remaining patients proceeded to complete CTRT. Bridging therapy with Low-molecular-weight Heparin was provided prior to Intracavitary Brachytherapy under sedation because Spinal anaesthesia was contraindicated.

Conclusions: Having a broader differential diagnosis in non-metastatic Ca. Cervix patients with Neurological Symptoms during CTRT will allow timely interventions for life threatening conditions and timely completion of CTRT+ Brachytherapy.

SOL 070

"A Single Institute, Retrospective Experience In The Treatment Of Head And Neck Cancer Patients: Exploring The Determinants Of Sepsis Associated With Chemoradiotherapy"

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Background: The infection rate among patients with head and neck cancer (HNC) undergoing chemoradiotherapy (CRT) is approximately 19% and sepsis related death 3-9%. Previous study in our institute revealed sepsis related deaths in HNC patients during CRT at 12%.

Objectives: The objective of this study is to investigate the utilization of sepsis surveillance and early intervention in reducing the occurrence of sepsis-related deaths in locally advanced HNC patients receiving CRT.

Methods: This retrospective analysis examined 54 patients with locally advanced HNC undergoing CRT who underwent sepsis surveillance between January 2018 and December 2021. The study recorded the utilization of oral and intravenous antibiotics, G-CSF, early admissions with reasons, and the incidence of early mortality. Data analysis was conducted using Microsoft excel v.2404.

Results: Among the 54 patients, 48 (89%) completed radiotherapy (RT), while 13 (24%) underwent all 6 cycles of chemotherapy (CT). Twenty-one (39%) patients were prescribed oral antibiotics, and 14 (26%) received G-CSF on an outpatient basis. 29 (54%) patients required hospital admission, with four admitted due to neutropenia of Grade 2 or higher. Among those admitted, 28 (96%) received intravenous antibiotics, and 18 (62%) were administered G-CSF. In eight cases, antibiotic treatment was intensified due to persistent fever and deteriorating neutropenia. One (3%) of the hospitalized patients succumbed to sepsis.

Conclusion: The prompt use of antibiotics and G-CSF along with early hospitalization, when necessary, significantly reduces the occurrence of sepsis-related early deaths in HNC patients undergoing CRT.

SOL 071

Dose volume correlation of osteoporosis in Pelvic bones using opportunistic computed tomography in carcinoma cervix treated with definitive Radiotherapy.

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Introduction: Carcinoma cervix is the second most cancer affecting Indian women. Definitive chemoradiation remains the mainstay of the treatment in locally advanced stages. One of the late toxicities of pelvic radiotherapy is osteoporosis which can impact the quality of life in cancer survivors. Even though DEXA (Dual Energy Xray Absorptiometry) is considered as the gold standard in assessment of bone mineral density, it is not performed routinely due to financial constraints. Several studies have shown that Hounsfield unit (HU) obtained from clinical computed tomography may yield information leading to the diagnosis of decreased bone mineral density, without added expense to the patient. There is a paucity of data on dose volume correlation of degree of osteoporosis. Osteoporosis is the precursor of other skeletal events such as pelvic insufficiency fractures. Our objective is to assess the correlation between the dose to pelvic bones and degree of osteoporosis in carcinoma uterine cervix patients treated with definitive radiotherapy using computed tomography.

Methods: Radiotherapy charts of all carcinoma uterine cervix patients treated in the Department of Radiation Oncology; St. John's Medical College Hospital between January 2013 till June 2022 were analysed. Each pelvic bone was separately delineated. The doses to pelvic bones such as Dmean, D50, Dmax, V30, V40,V50,V60 are documented. Also, the HU of individual pelvic bones in both pre-radiotherapy and post radiotherapy contrast enhanced computed tomography scans are documented. The doses to the bones is correlated with the decline in HU of the individual bones.

Results: 57 patients are included in this study. 4 patients had grade 2, and 1 patient had grade 3 musculoskeletal pain. Among pelvic bones, sacrum had mean 73% decline (SD 19%) in HU and fifth lumbar vertebra had mean 45% decline (SD 7%) in HU following pelvic irradiation as compared to the control bone outside the field of radiation which is tenth dorsal vertebra whose mean HU decline was 19% (SD5%) . There is a strong correlation between the dose to the bone and the decline in the HU.

Conclusion: we conclude that decline in HU is positively correlated with the dose of radiation received to individual bone sub-sites. In our study Dmax and V30Gy correlated with the degree of osteoporosis as determined by the opportunistic CT scan.

SOL 072

A Rare Primary Neoplasm of Breast

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Introduction: Synovial sarcoma is a rare and aggressive soft tissue sarcomas usually arising from extremities and trunk. If present in unusual sites, the diagnosis is difficult.

Objective- To report a case of primary synovial sarcoma of breast.

Case report: 62y old women presented with lump in left breast for 3 months, examination revealed 7 x5 cms lump in left lower inner quadrant of breast. Mammogram suggestive of BIRADS 5 lesion. Clinically and on imaging no axillary nodes were noted. Trucut biopsy showed low grade spindle cell neoplasm, With the following IHC markers Vimentin strongly positive, BCL2 and TLE 1 positive. Patient underwent simple mastectomy with axillary exploration and received adjuvant RT of 40GY in 15# to left chest wall. Patient is doing well on 3 month follow up.

Conclusion: The evidence for treatment of primary synovial sarcoma of breast is not so clear due to its low incidence, surgical excision seems to be an important modality in treatment along with RT for better survival benefit.

SOL 073

Dyselectrolytemia post Cisplatin treatment resembling Gitelman-like Syndrome : A case report

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Background: Cis-diamminedichloroplatinum (Cisplatin) has made a significant impact as a radiosensitizer for the treatment of a variety of solid tumors for more than half a century. Electrolyte imbalance is one of the common toxicities of Cisplatin affecting 50 to 80% of the patients. Hypomagnesemia is the most common imbalance followed by hypokalemia, hypophosphatemia, hypocalcemia and hyponatremia. Electrolyte imbalance caused by Cisplatin can sometimes mimic Gitelman Syndrome. The rarity of this diagnosis makes it a unique and intriguing case with very few cases reported in literature.

Objectives: To understand and be aware of the uncommon and rare Gitelman-like Syndrome which can occur with Cisplatin chemotherapy which can cause morbid dyselectrolytemia.

Methods: Case Presentation :A 48 - Year old female presented to our center with a history of Throat pain and Dysphagia. She was evaluated and diagnosed as a case of Carcinoma Supraglottis. She received Definitive Radiation therapy with 4 cycles of Concurrent Cisplatin. A week after the 4th cycle, routine biochemical analysis revealed various electrolyte imbalances like hypomagnesemia, hypocalcemia, hypokalemia resembling the electrolyte disturbances seen in Gitelman syndrome without hypocalciuria. She was symptomatic for the next 3 weeks with fatigue, fever, muscle ache, and had persistent dyselectrolytemia. Several IV corrections were given to optimize the electrolyte levels. A diagnosis of Cisplatin induced Gitelman-like syndrome was made.

Conclusion : About 20% of patients treated with Cisplatin can develop renal side effects. In rare cases it can lead to Gitelman like syndrome characterized by hypokalemia, metabolic alkalosis, hypomagnesaemia, low-normal Blood pressure and hypocalciuria. True Gitleman syndrome is an autosomal recessive disorder caused by SLC12A3 or CLCNKB gene mutation. Our case also had a similar presentation but with no hypocalciuria. Therefore this drug should be considered among the possible causes of persistent dyselectrolytemia.

SOL 074

Overall Survival in Patients with Resected High-Grade Glioma Treated with Adjuvant Therapy

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Background: Glioblastoma (GBM) is the most common and aggressive primary intracranial tumour. Despite modern therapies, it is still fatal with poor prognosis.

Objectives : The objective was to assess median Overall Survival in GBM patients who underwent primary surgery followed by chemo-radiotherapy and 6-month adjuvant chemotherapy with temozolomide.

Materials and methods: Single-institution retrospective study of 67 patients of high-grade gliomas (HGG) from 2017 to 2022. Data regarding patient factors, disease factors, and treatment factors were collected and survival was calculated.

Results: 67 patients with HGG were analysed, male to female ratio was 2:1. Maximum patients are of Grade IV glioma(55%). 85% of the patients presented with Performance Score 1 or 2. Radiation dose was 60Gy and Chemotherapy used was Temozolomide. After completion of the treatment 59% of the patients presented with Progression at the median PFS of 8 months. The median overall survival (OS) was 15 months and the median OS was 20 months in the patients of age less than 50 years and good PS (<2).

Conclusion: OS in GBM patients remain poor despite constant research and studies. Maximum safe resection followed by adjuvant radiation and temozolomide has shown improvement in OS. Young Patients with Good PS have better OS benefit.

SOL 075

Efficacy of CDK4/6 Inhibitors in Metastatic Breast Cancer: Real-World Insights from a Single Institute

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Background: CDK4/6 inhibitors have become the standard of care for the treatment of HR+ MBC based on clinical trials. However, real-world experience and efficacy in various subgroups are still lacking. Therefore, we conducted a study to analyze the use of CDK4/6 inhibitors in the treatment of HR-positive MBC and assess the related outcomes.

Materials and Methods: A total of 120 patients who received CDK4/6 inhibitors from 2015 to 2021 were analysed. Detailed clinical, demographic information and tumour-related factors were obtained on each patient. Progression-free survival, toxicity profile and tolerance to CDK4/6i were analysed and correlated.

Results: Among the 120 patients analyzed, 100 received palbociclib, while ribociclib and abemaciclib were given to ten patients each. The median age of the population was 57 years. With a median follow-up of 28 months, the median PFS and overall survival (OS) were 25 and 54 months, respectively. The PFS did not significantly differ among different anti-hormonal agents used in combination with CDK4/6 inhibitors. Patients who were resistant to endocrine therapy had a shorter PFS compared to treatment-naive MBC patients (22 vs. 40 months). Patients with strong hormonal receptor expression had a significantly better PFS compared to those with weak expression (25 vs. 14 months). Her2Neu-negative patients responded better than those with low positive expression (p=0.039). Visceral metastatic disease was associated with a significantly shorter PFS (17 months) compared to skeletal metastasis (32 months). There was no statistical significance when CDK4/6 inhibitors were used in different lines of treatment or with dose reduction.

Conclusion: CDK4/6 inhibitors demonstrate similar responses and better tolerance in real-world evidence. Further studies are necessary to identify other predictive and resistance factors for the use of CDK4/6 inhibitors.

SOL 076

Primary breast sarcomas: A case-series study treated at our Institute

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Aims and objectives: Sarcoma of the breast is a rare malignancy with heterogeneous histology. They are non-epithelial, composed of mesenchymal mammary tissue and are difficult to diagnose from other sarcomas arising in breast. To retrospectively study the therapeutic modalities of primary breast sarcomas at our Institute.

Methods: It is a monocentric, descriptive, retrospective study including 5 cases of primary breast sarcoma treated over a period of 5 years in the oncological department. PBS Diagnosis was made on the basis of Histopathology and IHC findings. All the data related to diagnosis, treatment and outcomes were collected and analysed.

Results: In our study, 5 cases of non-metastatic breast sarcomas that has been identified. The age group of presentation was 32-65 years with mean age being 48 years. Surgically, all our patients underwent mastectomy. Among them, 3 patients received adjuvant radiotherapy of 50Gy. One of the 5 patients, who had initially underwent mastectomy with no adjuvant treatment had presented with local recurrence at the operative scar 3 years later. She underwent re-excision and adjuvant radiation. All the patients were followed up every 3 months for a period of 3 years. Another patient who underwent Mastectomy with no adjuvant treatment came back after 1 year with recurrence over the chest wall and metastases to thoracic vertebrae. Nevertheless, a complete remission was noted in all 4 patients during the mean follow up period of 3 years.

Conclusion: Breast sarcomas remain a very rare entity of aggressive tumours. The therapeutic approach is poorly codified. For this reason, the therapeutic decision should always be discussed in a multidisciplinary assessment. Adjuvant Radiation plays an important role in preventing Recurrence or Relapse.

SOL 077

Dose-dense epirubicin and cisplatin (ddEP) in adult osteosarcoma

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Background: Triplet regimens incorporating doxorubicin, cisplatin and ifosfamide/methotrexate may improve pathological response, but increase the toxicity and cost, with no data showing improved survival in adult osteosarcoma. Dose-dense schedules have not been evaluated in this population.

Methods: We conducted a retrospective study of adults receiving ddEP chemotherapy (epirubicin 90mg/m2 and cisplatin 70mg/m2 every 2 weeks for 12 weeks) for osteosarcoma from 2014 to 2022 at a tertiary referral center. 41 patients received ddEP and 13 patients received other regimens (control group) based on physician preference during the same period. Outcomes assessed included histopathological response to chemotherapy, recurrence-free survival (RFS), overall survival (OS) and toxicity.

Results: Of a total of 54 patients, 77.8% were male and the median age was 22.5 years (IQR 19-30). The distal femur was the commonest site. Out of 33 patients with baseline staging available, 48.5% had Stage IIB disease. 10 patients had lung metastases at presentation. 28 patients received ddEP preoperatively while 13 received it in the adjuvant setting. 20 out of 28 receiving neoadjuvant ddEP underwent surgery at our centre. Of the 8 patents who did not undergo surgery, 4 progressed on treatment, 1 died, 1 did not consent for surgery and 2 were lost to follow up. A good histological response (≥90% necrosis) was seen in 35% of patients receiving ddEP compared to 23.1% in the control group. At a median follow-up of 8.5 months for the ddEP group, RFS was 86.9%, and OS was 95%, while for the control, at a median follow-up of 18.3 months, the RFS was 55.6 % and OS 72.7%. At 10 months of median follow-up for the entire cohort, the RFS was comparable in both groups- 86.9% for the ddEP group and 83.3% for the control group. Grade 3 anemia was seen in 42.4% and 75.0%, grade 3/4 thrombocytopenia in 22.2% and 90.9%, and febrile neutropenia in 7.3% and 61.5% in the ddEP and control groups respectively. Completion of all planned cycles of treatment was similar at 77% in both groups. The total cost of this regimen using generic drugs is EUR 622 (USD 668).

Conclusions: ddEP may be a cost-effective alternative to current systemic regimens for osteosarcoma, producing a similar histological response and comparable survival with lower toxicity.

SOL 078

"Decoding Lung Cancer Trends: Insights from a Single-Institution Clinico-Epidemiological Retrospective Study"

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Background: Lung cancer holds the top spot for both occurrence and mortality worldwide in males, ranking fourth in India. Its risk factors and epidemiological patterns differ based on geography, with tobacco smoking standing out as the primary risk factor. Variations in occurrence and behaviour between genders are also widely recognized.

Objectives:1.This study presents the cancer patterns, trends, and clinical characteristics of all lung cancer patients in our hospital, contrasting them with the profile of lung cancer patients in India. 2. Reviewing treatment objectives and the current trends in implementation.

Methods: An analysis of relevant clinical information from a consecutive series of lung cancer patients treated at Vydehi Institute of Medical Sciences and Research Centre, Bengaluru, from January 2015 to December 2021, in a retrospective hospital-based study.

Results:A total of 313 patients were examined, with the majority falling in the 5th to 6th decade, and the mean age at presentation being 56.69 ± 10.942 years. The cohort comprised 81.5% males, with an ECOG performance status of 1 observed in 61.3% of cases. Most patients hailed from West Bengal (38.3%), followed by Karnataka (31.6%). Among them, the majority were smokers (65.8%). Adenocarcinoma (AD) constituted the most prevalent histological type (55%), followed by squamous cell carcinoma(SCC) (27.8%) and small cell lung cancer(SCLC) (14.1%). Among female smokers, AD was the predominant histology (71.4%), while in male smokers, AD (49.7%) followed by SCC (31.2%) were the most common. Right-sided lung cancer was observed in 54% of patients. The majority of diagnoses occurred at advanced stages (III or IV) (27.2% and 71.2%, respectively), with most patients receiving palliative treatment (70%). Never smokers had a median age of 53.21 ± 11.89 years, with males comprising 52.3% and females 47.7%. AD prevalence increased from 52.8% in 2015 to 67.9% in 2022. The most commonly used chemotherapy regimen for AD was pemetrexed and carboplatin (67.4%), while for SCC it was paclitaxel and carboplatin (62.1%), and for SCLC it was etoposide and cisplatin (90.9%). For definitive intent treatment, the most common radiation dose was 60 Gy in 30 fractions (50%), whereas for palliative intent it was 30 Gy in 10 fractions (42%).

Conclusion: The male predominance observed mirrors findings from other Indian reports. Interestingly, non-smokers in our study exhibited a similar median age to smokers, with nearly equal representation of males and females. Standard chemotherapy and radiation therapy doses were administered according to guidelines for treatment.

SOL 079

"**Deviant sites of Ewing's sarcoma- A case series and literature review"**

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Background: Ewing's sarcoma, a highly aggressive tumor, primarily affects bones and is common in children and young adults, accounting for 10-15% of all bone sarcomas. Originating from mesenchymal progenitor cells, it typically occurs in the diaphysis of long bones like the femur, tibia, humerus, and pelvis. The Ewing's sarcoma family includes Osseous Ewing's sarcoma (OES), Extraosseous Ewing's sarcoma (EOES), Primitive Neuroectodermal Tumors (PNET), and Askin's tumor (PNET of the chest wall). EOES is extremely rare, with an incidence of 0.4 per million. This case series presents 14 instances of Ewing's sarcoma in uncommon osseous and extraosseous sites.

Objectives: To explore and be aware of the atypical locations where Ewing's sarcoma might develop.To delve into the behaviour, treatment response and prognosis of unique instances of Ewing's sarcoma. To review current literature and future research trends to address these distinctive cases effectively.

Methods:A retrospective analysis was undertaken at Vydehi Cancer Center from January 2019 to December 2023, to review cases of Ewing's sarcoma. We identified 14 instances of both osseous and extraosseous Ewing's sarcoma presenting in unusual locations. The medical records of all patients were thoroughly reviewed, including comprehensive analysis of clinical data, treatment modalities, and follow-up records.

Results: Fourteen patients were diagnosed with Ewing's sarcoma in uncommon sites, including the gluteal region, kidney, orbit, rectum, brain, paraspinal region (2 cases), and various unusual osseous locations such as the calcaneum, scapula (2 cases), fibula (2 cases), and proximal radius. The ages ranged from 5 to 75 years, with a median age of 27.2 years. Over half of the patients (57.1%) completed treatment, but there was a notable recurrence rate of 42.8%, with metastases occurring during or within a year after treatment in 21.4% of cases. Survival rates varied by site, with uncommon osseous sites having lower survival compared to extraosseous sites. Literature review highlights drugs under trial like Cabozatinib, Olaparib, and Vorinostat, along with immune checkpoint inhibitors and CAR T-cell therapy. New treatment trends are targeting ETV6 to modulate the fusion protein EWS-FLI1 and halt tumor growth.

Conclusion: In Ewing's sarcoma cases occurring in atypical locations, treatment response, prognosis, and survival rates were notably inferior, with a heightened risk of recurrence and metastasis. Further investigation into this distinct behaviour is essential to develop tailored treatment strategies for these patients, aiming to maximise survival outcomes. Current research and new treatment modalities aim to target this aggressive tumour at the molecular level, paving the way for future improvements in potential outcomes.

SOL 080

Efficacy of weekly paclitaxel with fixed dose of oral cyclophosphamide as metronomic chemotherapy in locally advanced and metastatic gastric carcinoma – phase 2 study

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Background: There are limited treatment options of chemotherapy in patients with unresectable locally advanced and metastatic gastric carcinoma with dismal outcomes. Patients are nutritionally poor resulting in poor tolerance and increased toxicity. We assessed the efficacy and safety of weekly paclitaxel and daily oral cyclophosphamide as metronomic chemotherapy.

Methodology: In this phase 2 trial, we included chemotherapy – naïve and unfit for standard of care chemotherapy (CAPOX,FLOT) , unresectable locally advanced and metastatic (upfront and recurrent/refractory) gastric carcinoma patients for Paclitaxel 60mg/m2 weekly for 12 weeks with daily oral cyclophosphamide 50mg od till disease progression/tolerance. Patient's response and toxicity were assessed clinically before each cycle, CECT thorax + abdomen was performed 3 monthly. The estimated sample size is 60 and this is an unplanned interim analysis. Primary endpoint of progression free survival (PFS) and secondary endpoint of overall survival (OS) is analysed using Kaplan Meier survival Curve, Frequency of Drug toxicity graded as per CTCAE v5.0 and response rates using RECIST 1.1 criteria.

Results:26 patients were enrolled with; 20 (76.9%) recurrent/refractory and 6 (23.1%) chemotherapy-naïve respectively. The median age was 46.2 years (range 18-66 years). The median PFS was 14.7 weeks (95% CI,11.5 to 18.6 week) and median OS was 23 weeks (95% CI,26.1 to 78.4 week) respectively. Among 21 patients evaluable for response at 3 months, 1 patient had partial response (4.7%), 4 patients had stable disease (19%) and hence clinical benefit rate of 23.8%. Median number of cycles completed were 4. One patient had grade 3 and one patient had grade 4 neutropenia, one patient had grade 2 peripheral sensory neuropathy, no grade 3-4 non-hematological toxicity observed.

Conclusion: This unplanned interim result suggests that weekly Paclitaxel for 12 weeks with daily oral cyclophosphamide till disease progression/tolerance is an efficacious, cost-effective, safe and comparable regimen to historical data for irinotecan and S-1.

SOL 081

Target delineation in Carcinoma Gall bladder - A difficult Case

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Background: Surgery remains treatment of choice for early stage carcinoma Gall bladder. Majority present in locally advanced stage where radiotherapy and chemotherapy play a role. RT is mainly advocated in adjuvant setting.

Objective: To delineate structures for radiotherapy in a case of post op Carcinoma gall bladder.

Methods: A 64 year male was diagnosed with Carcinoma gall bladder and U/w surgery. The post op histopathology showed extension to transverse colon, direct invasion to stomach and tumor positivity of resected neck of gall bladder. I/v/o margin positivity, patient was planned for Adjuvant RT. Contouring required a multitude of interventions. Oral contrast was given to identify stomach as an organ at risk (OAR). After a thorough discussion with the surgeon, duodenal stump was identified with the help of surgical clips. CTV High risk was contoured after delineating portal vessels supplying cystic duct. 45Gy/25Fr was planned for CTV post op bed, while a higher dose of 50Gy/25Fr was planned for HR-CTV using simultaneous integrated boost.

Result: Patient was treated with a total dose of 50Gy/25Fr with IMRT technique. However, the patient discontinued treatment after 16Fr i/v/o subdiaphramatic abcess.

Conclusion: Target delineation in post op cases require, in addition to review of the histopathology reports and imaging, a thorough discussion with operating surgeon in order to identify high risk areas.

SOL 082

Study Of Factors Affecting The 100 Day Mortality In Advanced Solid Malignancies-Real World Experience

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Background: Advanced stage IV patients accounts for around 50-60%. In the past, it was only the best supportive care, but now various systemic therapies with metastasectomy improved their outcomes. Mortality rate is a visible clinical indicator and many factors affects it.

Objectives: To determine the 100 day mortality of advanced stage IV patients and study the factors affecting them.

Methods: This is a Retrospective Cohort study of 144 advanced stage IV solid malignancy patients aged more than 18 years who were planned for palliative systemic therapy over 6 months duration. Necessary data was collected retrospectively from the hospital electronic records. Hundred day mortality was assessed by the electronic records and telephonic interview. Study data was entered in Microsoft-Excel and analysed using SPSS V25. $P<0.05$ was considered as statistically significant.

Results: Median age of patients included in the study was 53 years, 19.4% were more than 65 years. Males and females were equally distributed. Gastrointestinal and biliary tract cancers were the most common cancers, accounting for 35.4%. Eighty eight percent cases were metastatic cases, among them 11.8% were oligometastatic. Hundred day mortality was 16% (23 patients). In this study subgroup analysis was done to study the effect of various factors on 100 day mortality and showed neutrophil lymphocyte ratio ($P=0.04$) and performance status ($P=0.02$) are the significant associated factors.

Conclusion: Neutrophil lymphocyte ratio and performance status are the two important factors affecting the 100 day mortality.

SOL 083

Synchronous Ovarian Granulosa Cell Tumor And Carcinoma Endometrium Due To Estrogen Secretion- A Rare Presentation

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Background : Granulosa cell tumor (GCT) is a low malignant potential ovarian tumor accounting for 70% of all sex cord stromal tumor. It is an estrogen secreting tumor, hence diagnosed in early stages, associated with 20-30% concomitant lesion in endometrium including 5% of invasive adenocarcinoma. Synchronous dual malignancies are to be managed considering both the sites individually.

Objectives:To present synchronous occurrence of ovarian and endometrial malignancy

Case details: 52 year old female , P3L2A0 came with complaints of Irregular menstrual bleeding since 2 months MRI abdomen and pelvis was suggestive of endometrial lesion infiltrating <50 % of the myometrium and with synchronous left Ovarian lesion with a normal CA 125 (10.7 IU/ML). Operated for the same and post op histopathology showed FIGO stage IC GCT of left ovary with surface deposits and Endometrioid carcinoma of endometrium, grade 1 FIGO stage IA, low risk with P-53 negative by IHC. Postoperative INHIBIN A and INHIBIN B levels were normal and Postoperative PETCT scan showed no focal hypermetabolic or enhancing lesion. After discussion in tumor board patient received adjuvant treatment of 3 weekly, 6 cycle Inj Paclitaxel and Inj Carboplatin as indicated for FIGO stage IC GCT and observation for endometrium. Presently patient is on regular follow up.

Conclusion: Presence of synchronous endometrial lesion with suspicious ovarian mass at presentation should suspect the diagnosis of estrogen secreting GCT with endometrial lesion. At least testing for TP53 and MSI can be considered for predicting the risk in carcinoma endometrium in Indian settings.

SOL 084

A rare case of metaplastic carcinoma breast with confusing presentation as phyllodes tumor.

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Background: Metaplastic Breast Carcinoma (MBC) is a rare heterogeneous group of primary breast malignancies with different subgroups; exhibits a variety of histopathologic patterns and appears to be both epithelial and mesenchymal in origin. The ideal treatment for MBC remains unknown, due to its low incidence and pathological variability. Owing to its rarity, MBC has been treated as a variant of Invasive Duct Carcinoma (IDC). But it has poorer prognosis as compared to IDC. Patients with metaplastic breast carcinoma needs to be managed with proper Multi-modality therapy for better results.

Case presentation : 46 year software professional presented with left breast lump noticed since 12 years small in size , gradually increasing in size since 4 to 5 months. The lump in breast was evaluated in outside institute. Mammogram had a well defined radio opaque lesion 8.2 x 7 cm - BIRADS IVA. .The core biopsy report was malignant phyllodes. Base on further evaluation she was posted for simple mastectomy with free flap reconstruction. The final histopathology report was METAPLASTIC CARCINOMA (pT3N0Mx). Imunohistochemistry was performed, SMA and VIMENTIN positive, CD 34 and PANCK - negative - owing to MBC (monophasic sarcomatoid type with smooth muscle differentiation)

Conclusion : Metaplastic breast carcinoma is a rare entity with no standard treatment guidelines. Surgery remains the main modality of treatment. Traditional chemo- and hormonal therapies for IDC are ineffective against METAPLASTIC Breast carcinoma. While histology specific novel chemotherapeutic strategies may offer a survival advantage; like addition of platinum based chemotherapy regimen for squamous subgroups, or high dose anthracyclin-ifosfamide regimen for sarcoma subgroup. Regardless of the type of surgery, adjuvant radiation should be considered as a part of the treatment modality for patients with MBC. The prognosis of patients in this rare sub group remains poor.

SOL 085

Real World Evidence Of Neoadjuvant Docetaxel / Carboplatin / Trastuzumab / Pertuzumab (TCHP) In Patients With Her2-Positive Early Or Locally Advanced Breast Cancer

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Background: In HER2-positive breast cancer NACT with dual HER2-targeted therapy achieves high pathologic complete response (pCR) rates. In TRYPHAENA , a high 57·3%–66·2% proportion of patients achieved a pathological complete response with Pertuzumab and Trastuzumab in combination with standard anthracycline-based and non-anthracycline-based neo adjuvant regimens.

Objective: We aim to share our experience of 10 patients whom we looked for Epidemiologic factors, patient characteristics, Response rates & Toxicity profile of the above regimen in the Indian setting.

Methods: We retrospectively reviewed medical records of patients with early or locally advanced HER2-positive BC who underwent neoadjuvant TCHP followed by curative surgery at our institute between January 2022 and till date .

Results: of 10 patients, 8 (80%) received total mastectomy . In terms of neoadjuvant chemotherapy response, pathologic complete response (pCR) was analyzed. 5 (50%) had pCR, 3 had residual disease , 1 patient expired after defaulting the 1 st cycle and 1 is awaiting surgery. Fatigue (90%), Diarrhea (80%) (1with Grade 3 and 6 with Grade 2) and Mucositis (20%), were the most common non-hematologic adverse events. 2 also had hyponatremia requiring admission. In terms of hematologic adverse events, anemia (60%) was the most commonly observed adverse event. 1 patient also had Grade 3 Febrile Neutropenia.

Conclusion: HER2-positive breast cancer has undergone tremendous advances. We hope to use TCHP in the NACT setting for all affordable patients to further improve response rates thus DFS .

SOL 086

Exploring The Impact Of Irinotecan And Bevacizumab In The Treatment Of Recurrent Glioblastoma Multiforme - A Case Series

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Introduction: The most prevalent primary malignant brain tumour in adults is called glioblastoma (GBM), and it is characterised by aggressive behaviour and a poor outcome. 90% of patients have progression or recurrence following the first-line standard therapy using the Stupp procedure. There is no standard of care and controversies persist regarding the evidence supporting second-line treatments. This research aimed to present empirical data supporting the use of bevacizumab plus irinotecan (BEV+IRI) as a second-line GBM treatment.

Methods:Retrospective analysis was conducted on adult GBM patients who experienced their first recurrence following Stupp protocol treatment. Of these, we identified patients who had second-line BEV+IRI treatment at our institution between 2018 and 2023 (10 mg/kg and 125 mg/m2, respectively, every two weeks, dose modified if patients were on enzyme-inducing antiepileptics. Data was collected from health records.

Results :Among the 10 patients, 73% (n=8) patients were male. Median age 44, Frontal localisation of GBM was the most common (n=7, 63%), all patients received BEV+IRI, with a mean of 10 cycles, 2 patients had dose modification as they were on enzyme-inducing AEDs.Following assessment, patients with stable disease were on maintenance Bevacizumab(n=6, 55%). The median PFS (mPFS) was 5 months (95% confidence interval [CI] 3.207 to 6.2475),

Conclusion : In this analysis mPFS 5 months vs 4 months in (RTOG 0625). The toxicity profile was not significant except for One patient who experienced a thrombotic event that led to discontinuation of Bevacizumab. Given the scarcity of evidence for standard therapy of recurrent GBM, this effort highlighted our institution's experience.

SOL 087

Outcomes of young rectal cancer: A retrospective observatonal study from a regional cancer centre in southern india

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Background: The incidence of rectal cancers in adolescents and young adults aged less than or equal to 40 years has been increasing in recent years. Early diagnosis and treatment pose challenges in these subsets of patients. Indian data regarding the outcome of young rectal cancer are limited.

Objective: This study aim to assess and correlate the outcome with prognostic factors in young-onset rectal cancer

Materials and Methods: This was a retrospective observational study of patients with rectal cancers in adolescents and young adults treated at Cancer Institute, Chennai, India, from 2012 to 2017. Data were captured from electronic medical records of the hospital-based cancer registry of the Cancer Institute. Overall survival was calculated using the Statistical Package for the Social Sciences software.

Results: We included 150 patients in this study. In this analysis, 90 cases (60%) were male, and 60 cases (40%) were female patients, among which 15.3% were smokers, and 10.6% of patients had a family history of cancer. Out of 150 patients, 132 patients (89.33%) had adenocarcinoma, 17 patients (10%) had poorly differentiated carcinoma, and one patient (0.67%) had squamous cell carcinoma as histopathology. Rectal bleeding (89.3%) was the most common symptom in most patients at presentation. The majority of the patients were treated with neoadjuvant concurrent chemoradiation (80.6%), followed by surgery and adjuvant chemotherapy based on postoperative histopathology. The remaining patients who were operable at presentation underwent surgery. About 4.66% of patients defaulted to treatment. Those patients with upfront metastatic disease received palliative chemotherapy. The 5-year overall survival in these patients was 35.8%. The stage of the disease, histology, and treatment modalities play an essential role in determining the overall outcome of this disease.

Conclusion: This study shows outcome and prognostic factors in the patient with young rectal cancer in real-world scenarios.

SOL 088

Von Hippel-Lindau (VHL)-A rare case report.

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Introduction: Von Hippel-Lindau (VHL) disease is a rare autosomal-dominant syndrome caused by mutations in the VHL gene, predisposing affected individuals for development of benign and malignant tumors in several systems including the central nervous system (CNS) and visceral organs. This condition is seen in nearly 1in 36000 live births.

Case report: We report a case of 25-year male presenting with lower limb numbness and weakness in May 2015. MRI showed bilateral cerebellar hemangioblastomas, treated with surgery resulting in full recovery. From 2017 to March 2023, he had multiple recurrences in brain and spinal cord which were operated. He also had orbital haemangioma with retinal detachment. In September 2023, he presented with recurrent lesions in floor of 4^{th} ventricle and intramedullary cord lesions. He was treated with External Beam Radiotherapy (45Gy in 25 fractions) to above mentioned sites and also with Pazopanib. CECT abdomen revealed renal cell carcinoma of left kidney, bilateral renal, pancreatic and left epididymal cyst. Family history revealed his mother and sister suffering from same condition. Follow-up MRI at 6 months post treatment showed stable disease.

Discussion: Despite their benign nature, hemangioblastomas are substantial cause of morbidity and death in VHL patients because of mass effect on CNS structures. Complete microsurgical resection yields favourable outcomes in symptom and tumor control. Radiotherapy is an option for recurrent and unresectable CNS hemangioblastomas. Pazopanib may have potential benefits in the management of VHL disease, especially with renal cell carcinoma.

SOL 089

Beyond the norm: testicular seminoma's unusual journey to bone metastases

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Background: Testicular seminoma, the most common germ cell tumor, accounts for over 50% of cases. However, bone metastasis in testicular seminoma is rare, with an incidence of less than 5%, predominantly observed in Non-Seminomatous germ cell tumors and minimally documented in literature.

Objective :This study aims to contribute insights into treatment strategies, outcomes, and prognostic factors for advanced seminoma management. Additionally, it seeks to underscore the importance of vigilant follow-up in testicular cancer patients while highlighting disease progression from stage I to stage IIIC seminoma, evident through bone metastasis and pathological fracture.

Materials and Methods:A 38-year-old male initially diagnosed with stage I Seminoma underwent high inguinal orchidectomy, followed by one cycle of adjuvant chemotherapy. Two years later, he developed hip pain, leading to the discovery of a pathological fracture of the right femur shaft and multiple bone metastases on PET-CT scan. Biopsy confirmed a stage IIIC seminoma diagnosis, prompting initiation of palliative chemotherapy with Bleomycin, Etoposide, and Cisplatin. Subsequent assessments showed a significant reduction in metastatic lesions after four cycles, with further improvement observed after additional cycles and Zoledronate injections.

Results :Post-chemotherapy reassessment via PET-CT scan revealed a near-complete response, with the patient regaining mobility and carrying out daily activities independently.

Conclusion: This case underscores the rare occurrence of seminoma with bone metastasis and expands understanding of its clinical presentation and management strategies. Despite its advanced stage, the patient's favorable response to palliative treatment highlights the potential for good prognosis and even cure in metastatic seminoma. This emphasizes the importance of aggressive yet targeted therapeutic interventions for improved prognosis and long-term survival.

SOL 090

Altered sequencing platinum based neo adjuvant chemotherapy in triple negative breast cancer

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Background: Triple Negative Breast Cancer (TNBC), comprising 10%-20% of breast tumors, exhibits heightened sensitivity to cytotoxic chemotherapy, a phenomenon termed the 'triple negative paradox.' Standard neoadjuvant chemotherapy leads to a pathologic complete response (pCR) in 30%-40% of TNBC cases. Although platinum-based regimens show promise, they are not universally recommended except for BRCA-mutated cases. This study evaluates the response of TNBC to platinum-based neoadjuvant chemotherapy.

Methods: A prospective single-arm interventional trial was conducted from 2022 to 2023 with 30 TNBC patients, aged 20-65 years, and a Karnofsky performance status of ≥70%. Comprehensive evaluations including PET CT scans confirmed the absence of metastatic disease. Participants received alternating Epirubicin/Cyclophosphamide and Taxane/Platinum chemotherapy regimens, differing from the standard Adriamycin/Cyclophosphamide followed by Taxanes.

Results:The cohort's mean age was 53 years, with 66.7% being postmenopausal. The mean Ki67 index was 43%. Notable adverse effects included Grade 3 neutropenia (22%), Grade 3 fatigue (16.7%), Grade 2 febrile neutropenia (8.3%), Grade 2 thrombocytopenia (11.1%), Grade 3 nausea (2.8%), Grade 2 vomiting (11.1%), Grade 3 neuropathy (2.8%), and Grade 2 diarrhea (13.9%). A pCR was achieved in 55.5% of patients. Those with residual disease were treated with adjuvant capecitabine. Metastases primarily involved the lungs (55.6%), liver (50%), brain (30.6%), bones (25%), and locoregional areas (5.6%).

Conclusion: Platinum-based neoadjuvant chemotherapy in TNBC patients achieved a high pCR rate of 55.5% with manageable toxicities. These findings advocate for the inclusion of platinum agents in neoadjuvant regimens for early TNBC, underscoring their efficacy and tolerability.

SOL 091

Multimodal management of adrenocortical carcinoma a case series of long term survival

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Introduction: Adrenocortical carcinoma is a rare and aggressive malignancy with an estimated annual incidence of 0.5 to 2 cases per million people. Estimated 5 year overall survival remains poor at 15-44%. Older age, functioning tumors and incomplete resection are the important clinical factors determining poor prognosis. This abstract is to highlight the experience with three cases of long term survival with multimodal management.

Materials and methods:Locoregional recurrence free survival (LRFS) and OS were analyzed in three cases of ACC who survived long. All three cases were females with median age of 44 years, who presented with Stage II ACC. One was a functional ACC with Cushing's syndrome and other two were nonfunctional. Upfront open adrenalectomy was done in all three cases. Post-operative HPE confirmed low grade ACC with capsular invasion and microscopically detected R1 resection. Adjuvant therapy was considered due to margin positivity. Case 1 was followed with adjuvant radiotherapy. Case 2 and Case 3 were followed with adjuvant chemotherapy.

Results: The results of adjuvant therapy were retrospectively analyzed. Case 1 had 11 years LRFS with progression in the form of local recurrence and liver metastasis and now on palliative chemotherapy. Case 2 and Case 3 had 4 years LRFS. Case 2 underwent reresection of the lesion, but progressed to contralateral kidney, liver, lung and skeletal metastases 2 years later and surviving for 10 years with multiple lines of chemotherapy. Case 3 had an unresectable local recurrence, progressed to liver metastases with palliative chemotherapy and currently on palliative care.

Conclusion:Capsular invasion and margin positivity are risk factors for locoregional recurrence Adjuvant RT following R1 resection of ACC resulted in prolonged LRFS compared to chemotherapy. Multimodality treatment is the goal standard for prolonged OS.

SOL 092

Safety Profile Of Palbociclib In Geriatric Population (Hormone Positive,Her2neu Negative) Metastatic Breast Cancer-Our Institute Experience

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Background: Advanced breast cancer more prevelant in older patients, very few were included in pivotal trials. This study evaluated the safety of palbociclib in geriatric population group with metastatic breast cancer(Hormone positive and Her2neu negative patients)

Methods: Patients age more than 65 years treated with (Palbociclib 125mg OD for days 1-21 of each 28-day cycle till disease progression/unacceptable toxicity) plus Endocrine therapy (T.letrozole) for Hormone positive and Her2 neu negative metastatic breast cancers in our institute ,from May 2022 to October 2023,Number of patients 25 .We analysed safety data with (CTCAEv4.0 criteria) and quality of life using EORTC scale QLQ-C30

Results: Patient data analysed from may 2022 to october 2023.Number of patients 25.Median age 70.4,of whom 70% presented on adverse events.Most common grade 3-4 Neutropenia(56%).25% patients needed drug dose modifications.No drug related death

Conclusion: Palbociclib is well tolerated in Geriatric patient comparable to that in younger patients.However addition of Palbociclib to endocrine therapy shall be evaluated individually in this older and frailer sub groups.

SOL 093

Observational study on clinical profile and Microsatellite instability testing of Stage 2 Colorectal cancer at a Tertiary care cancer centre

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Introduction: Colorectal cancer (CRC) is a common cancer worldwide, with a low reported incidence in India. There is significant geographical variation in the presentation, and the incidence rates may also vary. There are very few studies evaluating the clinical profile and MSI testing of Stage 2 CRC in Indian patients.

Methods: We analysed cases admitted at the Vydehi Hospital, a tertiary care cancer centre in Bangalore, of patients with CRC stage 2 between January 2018 and April 2024. We collected details regarding the demography, symptoms, pathology, pathological stage, MSI testing, and treatment plan. The aim was to assess the demographic and clinical details and MSI testing of patients with Stage 2 CRC in India and compare them with those of the reported literature.

Results: Thirty patients with Stage 2 CRC were analysed. The mean age was 49.2 years. 66.6% were males. Patients were symptomatic for an average period of 4 months prior to presentation. The commonest symptoms were abdominal pain (81%), rectal bleeding (24%), and altered bowel habits (11.8%). Thirteen percent of the patients had signet ring tumours. The median CEA level was 3.28 ng/ml. Most patients had not undergone MSI testing; only 20% of patients underwent MSI testing, which included MSI-H (10%) and MSI-S (10%). Nineteen percent of the patients had a high-risk clinical presentation; the commonest was obstruction (19%), followed by perforation (11.7%).

SOL 094

"Assessment of imaging biomarkers to predict pathological complete response in patients with non-metastatic triple-negative breast cancer using a window of opportunity design"

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Introduction: TNBC, constituting 20% of breast cancer, is aggressive with high recurrence rates and visceral metastasis. pCR serves as a surrogate endpoint for survival. This study aims to associate dynamic changes in imaging biomarkers with pCR.

Methodology: The study includes 22 TNBC patients, received one dose of paclitaxel and carboplatin before neoadjuvant chemotherapy. PET CT scans done at baseline and after the study intervention to assess maximum standard uptake value (SUVmax), followed by standard NACT and surgery to evaluate pCR.

Results: The study involved 22 participants, mean age 46.5 years. 10 (45.5%) premenopausal, 12 (54.5%) postmenopausal. Lesion: 13 (59.1%) left, 9 (40.9%) right. Comorbidities: 5 (22.7%) diabetes, 17 (77.3%) hypertension. Tumor grades: 0 (0%) Grade 1, 10 (45.5%) Grade 2, 12 (54.5%) Grade 3. Tumor stages: 9 (40.9%) T2, 11 (50%) T3, 2 (9.1%) T4. Nodal status: 3 (13.6%) N0, 15 (68.2%) N1, 3 (13.6%) N2, 1 (4.5%) N3. Most underwent mastectomy (20, 90.9%), 2 (9.1%) had breast-conserving surgery. pCR achieved in 10 (45.5%). Wilcoxon Signed Rank Test compared median differences in SUVmax values of primary lesions and axillary lymph nodes at two time points, showing significant differences: $p=0.000$ for lymph nodes, $p=0.001$ for primary lesions. The Mann-Whitney U test found no significant association between SUVmax differences and pathological response in TNBC patients ($p=0.38$ for primary lesion, $p=1.0$ for lymph nodes).

Conclusion: Study found significant SUVmax reduction in primary lesion and axillary lymph node post paclitaxel-carboplatin; no significant association with pathological response.

SOL 095

Adolescent And Young Adults with Gastric Cancer (AYA-GC)- The Dilemma of An Under-Represented Group: A Multi-Institutional Analysis from The Indian Subcontinent

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Introduction: Gastric cancer (GC) is often ignored at a young age, which frequently leads to tragic consequences with an ever increasing incidence at a younger age.

Aims and Objectives: In view of the limited Indian publication, we sought to characterize clinicopathological parameters and risk factors in the adolescents and young adults (AYA) population.

Materials and Methods: Retrospective data from six centers (which are part of the Network of Oncology Clinical Trials in India) (2015-2020) were collected from patient (18–39 years of age) records.

Results: One-hundred fifty-two AYA GC patients were enrolled. Majority were- 31-39 years age group (76.3% females), nonalcoholic (93.4%), nonsmokers (98.0%), and negative family history (98.0%). The most common (MC) presenting symptom and sign were abdominal pain (67.1%) and antrum (48%) respectively; majority were type I and II Siewert classifications (77% [20/26] patients in cardia); MC histology—signet ring cell (67.1%) followed by diffuse-type (65.1%). Most were poorly differentiated (65.1%) and were diagnosed at an advanced stage (III & IV1⁄4 54.6%).

Conclusion: This is one of our country's first large multicenter studies on GC in the AYA population. There was a higher female prevalence, nonsmokers, neagative family history, aggressive tumor behavior and were diagnosed at a more advanced stage. Awareness among all those involved in cancer care must be improved to better the loss of life years in the younger population.

SOL 096

Tyrosine Kinase Inhibitors in metastatic driver mutation positive NSCLC – A single center experience

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Background: Lung cancer is the most common cancer world-wide and is also the leading cause of cancer related mortality. Majority of the cases are non-small cell lung cancers (NSCLC). The discovery of targetable driver mutations in these cancers have brought in a paradigm shift in the management.

Method: This is a retrospective study analysing the progression free survival (PFS) with TKIs against various targetable driver mutations in metastatic NSCLC treated at our centre. We analysed the data of 92 patients to understand the response rates, PFS and the effect of previous chemotherapy on the duration of response to these TKIs in these patients. Furthermore, we compared progression free survival with each TKI in each line.

Results: Out of the 92 patients analysed in this study 49 were below the age of 60 years and 43 were above the age of 60 years. 51 of them were females and 41 were males in our study sample. The commonest driver mutation observed was EGFR followed by ALK alterations followed by ROS-1 with the least common being ERBB2. It was seen that among the various TKIs used in EGFR mutations Afatinib had the longest PFS of 16 months followed by Osimertinib (9 months) and Gefitinib (9 months). In the ALK altered patients Ceritinib gave the longest duration of response followed by Crizotinib followed by Alectinib. Ceritinib gave better results in ROS-1 mutated patients also. We also analysed the effect of previous chemotherapy on the PFS but didn't observe any significant difference.

Conclusion: Metastatic NSCLC had a dismal prognosis of less than an year till the discovery of TKIs for the targetable driver mutations found in these cancers. The much improved prognosis with much lesser side effects shows how important these gene alteration tests are in these patients to provide optimal treatment. But in the real world especially in a resource constrained setting like India it becomes challenging to provide the optimal care.

SOL 097

The effect of photobiomodulation with laser therapy for oral mucositis in head and neck cancer patients on radiotherapy in tertiary hospital- a longitudinal study

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Introduction: Worldwide, head and neck cancer (HNC) is the seventh most common cancer. Overall accounting for an estimated 888,000 new cases & 453,000 deaths in 2018. With 119,992 new cases and 72,616 deaths due to oral cancers in 2018, India has the highest oral cavity cancer patients in the world. Around 30-40 % of cancer patients treated with chemotherapy develop mucositis and this rises to almost 90% for head and neck cancer patients treated with radio and chemotherapy. Laser photo-biomodulation is non-invasive , pain free & safe therapy with no associated adverse effects ,used for treating chemo-radiotherapy induced oral mucositis.

Materials & Methods: study design - longitutinal descriptive study

Study period- May 2023 to May 2024

Sample size- 30 patients with 20 patients completed till 10th may 2024

Treatment planned- radical ctrt /adjuvant ctrt upto 60-70 Gy with weekly inj cisplatin 40mg/m^2

Photobiomodulation with infrared laser of wavelength 660nm,100 mw power, 1 *1 cm^2 beam area, 1 minute/beam area, battery or mainsoperated 5v dc, covering around 40-53 points in the oral cavity & oropharynx.

Conclusions: Photobiomodulation is a non-invasive, well tolerated therapeutic method which is recommended for the treatment of chemo-radiotherapy induced pain & oral mucositis. Photobiomodulation is a safe & effective measure to mitigate oral mucositis associated with chemo-radiation. It is recommended to avoid tumor site & follow good clinical practice.

SOL 098

Modified Dose-Dense Docetaxel and Cisplatin for Patients with Borderline Resectable Head and Neck Cancers: Single Center Experience

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Introduction: A significant proportion of patients with head and neck cancers of the buccal mucosa present with locally advanced borderline resectable/unresectable disease. Currently, these patients undergo neoadjuvant chemotherapy followed by attempted surgery. Even though 3-drug TPF is considered standard, most are unfit to receive this regimen. We devised a dose-dense docetaxel+cisplatin regimen delivered q2weekly which was more tolerable for patients.

Methods: Records of patients referred for NACT for borderline resectable HNSCC of the buccal mucosa between January 2022 and December 2023 were analyzed for baseline features and outcomes.

Results: There were 154 patients with locally advanced disease, of which 72 received the modified DC protocol [median age: 50 (32-73), male (n= 47, 65.3%), stage III (n=8; 11.1%), stage IVa/b (n= 62; 86.1%), ECOG PS 2 or more (N= 4; 5.6%)]. After a median of 3 (range: 1-4) cycles, 32 responded (Overall Response Rate: 44%; CR=4, PR=28, progression: 28/72 (38%) while 13 had not been assessed]. Among those who responded (n=32), 20 underwent surgery, and another 6 were planned for surgery, while 6 defaulted after chemotherapy. After a median follow-up of 7.3 months (range (0.5-27 months), life status was available for 66 patients, of which 29 are alive and 37 are dead. The median survival is 12 (95% CI: 9-15) months. There were no admissions or grade 3-4 toxicity with this regimen.

Conclusion: The dose-dense TP regimen is a simple outpatient option for busy centers where TPF admission isn't feasible. It has minimal toxicity and response rates comparable to more aggressive regimens. Further prospective studies are warranted.

SOL 099

A Single Center Experience in Carcinoma Cervix - South India

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Background: Carcinoma cervix is the second most common cancer among women in India. A recent SURVCAN-3 study reported a 5-year cervical cancer survival rate in India, ranging between 38.6% and 63.9%. This study aims to retrospectively analyze the clinicopathological features and median survival rate at our center.

Methods: A total of 106 carcinoma cervix patients were recorded in our institute between January 2019 and December 2023. The median age was 54 years. Eleven cases underwent surgery, of which three were salvage surgeries. One hundred and one patients underwent concurrent chemoradiation, and five received adjuvant radiation alone.

Results: 91% of cases were Stage II - III. 95% of cases were squamous cell carcinoma. 83 % were postmenopausal women. 97% completed the treatment. Three patients defaulted on brachytherapy alone. 15% had documented metastatic recurrence during follow-up. Post-COVID period defaulters were contacted through phone calls. At the last follow-up, 78 patients were alive, with only 34 of them being on regular follow-up. Twenty-eight patients died, with one death attributed to COVID-19.

Conclusion: Survival and clinicopathological factors in our center correlated with the rest of the country. Measures such as motivation and counseling should be taken to ensure followup.

SOL 100

Feraful cry to tearful joy- successful story of gestational neoplasm from a single centre!

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Objectives: Spectrum of presentation of GTD,Efficacy of chemotherapy in treatment of GTN,Toxicity profile of patients undergoing treatment,Post treatment sequelae

Methods: It is a retrospective study inlcuded 88 patients diagnosed with GTD and underwent treatment in our institution from 2013 to 2023 (10years).Data collected were age at GTN diagnosis, gestational age at presentation, type of antecedent pregnancy prior to GTN, FIGO stage of disease and risk score group, type of treatment,response to treatment, menstrual and fertility function after treatment.

Results: From 88 patients mean age at presentation was 26years (range 18-43years). 76% were referral case. 56.8 % (50 patients) were found to be malignant , Thirty five of 50 malignant patients were in stage 1, two patients were in stage 2 and other eight patients were in stage 3. Most patients were in low risk group with only 6 were high risk. All had chemotherapy. Methotrexate was the most common first line chemotherapy (90%). Only 3 of 88 GTD patients had secondary amenorrhea. 37 of 50 (74%) achieved remission. 13 of 50 (26%) needed salvage chemotherapy. Of 50 GTN 10 were hysterectomised, 9 patients achieved future pregnancy, 9 were diagnosed with secondary infertility, 10 are not on follow up , 6 patients completed family, 6 were defaulted from treatment.

Conclusion: No single clinical factor was significantly associated with the development of persistent disease. Efficacious follow up using serum HCG titer is vital to identify women with persistent disease at an earlier stage. Most of the women with persistent disease fall into WHO low risk category and can be treated with monotherapy with Methotrexate alone. Complete remission was achieved with EMACO who fall into high risk GTN or who required salvage chemotherapy. Future pregnancy is possible after completion of chemotherapy and follow up.

SOL 101

Sinonasal Teratocarcinosarcoma: A Rare Clinical Manifestation

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Background: Sinonasal teratocarcinosarcoma is a rare aggressive tumor arising in the sinonasal tract, is of uncertain histogenesis with less than 70 reported cases. The average 2-3 year survival rates range from 45-60% with local recurrence rate of 25-55%.

Objective: To present a report on management of this rare tumor.

Methods: Case of 54y/F with right sided nasal obstruction, occasional blood tinged nasal discharge, sputum since 9 months. CT PNS – soft tissue lesion measuring 2.9*2.5*3.6 cm extending into anterior cranial fossa, nasal septum, destruction of right osteomeatal complex, loss of fat planes with superior, middle turbinate – suggestive of inverted papilloma/ sinonasal malignancy. Patient underwent endoscopic nasal mass excision in April 2022. Post op HPE showed malignant round cell neoplasm with rhabdoid differentiation. IHC – sinonasal teratocarcinosarcoma. Post op MRI showed residual lesion along cribriform plate with minimal intracranial extension. Patient received adjuvant chemoradiotherapy (CTRT) of 60Gy/30 Fr via IMRT technique to the tumor bed with 6 cycles of weekly Carboplatin from May-July 2022.

Results: PET CT at 4 months post CTRT- residual soft tissue thickening with no FDG uptake. The patient has shown complete clinical response 4 months post treatment and remains asymptomatic till date.

Conclusion: Trimodality therapy (surgery followed by CTRT) appears to be a promising treatment approach with better treatment outcomes.

SOL 102

Cervical leiomyosarcoma- a rare malignancy of the cervix

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Introduction: Leiomyosarcoma is one of the rare histopathological variants of tumours of the cervix comprising nearly 1% of overall tumours of the cervix. Diagnosis is made based upon the histopathology. Due to the relative infrequency of this disease, there is a paucity of reports in the literature and the available data regarding the natural history of cervical leiomyosarcomas derive from case reports.

Objectives: Approach and management of Cervical leiomyosarcoma.

Material & Methods: We present the case of a 37 year old female patient , who presented with history suggestive of abnormal uterine bleed 3 weeks. She underwent Total abdominal hysterectomy with B/L Salpingo-oophorectomy and the post op biopsy was suggestive of Cervical leiomyosarcoma with >20/10hpf mitosis and coagulative necrosis. Unfortunately patient had defaulted for five months and then she presented with Features suggestive of local recurrence with omental deposits and lung metastasis.

Results: Patient has been started on Gemcitabine and docetaxel and is currently on chemotherapy and is doing well. Plan is to give six cycles of chemotherapy and re assess.

Conclusions : Cervical leiomyosarcoma is a rare malignancy of cervix as already described and hence there are very less case reports across the globe regarding the approach and management of the same. We have presented our case here for two reasons , One – to consider cervical leiomyosarcomas as one of the differentials in evaluation of cervical malignancies due to the aggressiveness of these tumors compared to the other more common cervical neoplasms. Two – to highlight the management of this unusual malignancy of cervix.

SOL 103

Thiamine Deficiency And Neurological Symptoms In Patients With Gastric Cancer Receiving Chemotherapy

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Objective : Thiamine deficiency among medically ill patients is increasingly recognized ,but its prevelance in cancer patients is unknown .we evaluated the relationship between thiamine deficiency and neurological symptoms including mild or non specific symptoms and influence of chemotherapy on thiamine serum levels

Methods: Cross sectional study of 50 gastric cancer patients from period of march 2023 to march 2024 cancer patients who present to OP for chemotherapy their serum thiamine concentration was measured ,the relationship between the presence of neurologic symptoms and thiamine serum levels ,and change in thiamine serum level after chemotherapy

Results : Thiamine deficiency was significantly associated with neurological symptoms .thiamine serum levels were significantly lower in group without neurologic symptoms

Conclusion : Thiamine serum levels may be used as a reference to maintain neurological status during chemotherapy

SOL 104

A “Giant” Retroperitoneal Liposarcoma: A Case Report

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Introduction: Retroperitoneal liposarcomas represent a rare yet aggressive malignancy arising from the adipose tissues within the retroperitoneal space. Their indolent growth pattern often results in delayed diagnosis, with tumours frequently attaining significant dimensions before manifesting with overt clinical symptoms. Giant liposarcoma is usually defined either as tumor diameter of 30 cm or more or tumor weight of 20 kg or higher.

Case presentation: A 63-year-old man, presented with abdominal distention for 6 months. This case report presents a unique instance of a patient harbouring a massive retroperitoneal liposarcoma, pushing the left kidney upwards towards the diaphragm and displacing the descending colon and sigmoid colon to the right side of the abdomen..Imaging revealed a large fatty mass (36x35x28cm) in the left abdomen consistent with retroperitoneal sarcoma. He underwent surgery to remove the mass (38x37x30cm) which pathology confirmed as a well-differentiated liposarcoma (grade 1).

Discussion: Surgery is the cornerstone of treatment for RPS, aiming for complete (R0) resection with negative microscopic margins. This approach offers the best chance for cure and improved long-term outcomes. Careful preoperative planning is crucial. Imaging studies like CT scans and MRIs help define the tumour's extent and its relationship with surrounding vital structures. This information is vital for the surgeon to strategize the best approach for achieving complete resection while minimising complications. Meticulous surgical technique with meticulous dissection of tissues helps achieve clean margins and potentially reduces the risk of local recurrence in the future.

Conclusion: Despite the huge size of the tumour, Surgical resection remains the cornerstone of treatment for even the largest retroperitoneal sarcomas.

SOL 105

Genetic Insights: NME1 Gene Variant in Ovarian Cancer – A Case-Control Study

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Background: Ovarian cancer (OC) remains one of the leading causes of gynecological cancer-related deaths globally. Understanding the genetic underpinnings of OC is crucial for early detection and personalized treatment strategies. The *NME1* gene, specifically the rs16949649 T>C variant, has been implicated in various cancer types, but its role in OC requires further investigation. Noteworthily, our study is the first to explore it in South Indian women.

Objectives: This study aims to evaluate the association between the *NME1* rs16949649 T>C variant and the risk of developing OC.

Methods: A case-control study was conducted involving 95 ovarian cancer patients and 95 age-matched healthy controls. Genomic DNA was extracted from blood samples, and the variant was genotyped using polymerase chain reaction-restriction fragment length polymorphism (PCR-RFLP) technique. Statistical analysis was performed to assess the association between the variant and OC risk and its correlation with clinical parameters.

Results: The TC genotypes of the *NME1* rs16949649 T>C variant had a marginally significant association with increased OC risk in patients with advanced FIGO stage (OR=2.443, 95% CI: 0.863-7.740, p=0.093) and exhibiting high-grade cancer (OR=2.346, 95% CI: 0.922-6.332, p=0.0736). However, no association was found in genotypic and allelic distribution between the cases and controls.

Conclusion: The NME1 rs16949649 T>C variant plays a significant role in OC susceptibility and progression. This genetic variant may serve as a potential biomarker for early detection and prognosis of OC. Expanding the study to a larger cohort could yield more significant and comprehensive results.

IMMUNOTHERAPY

IMM 01

Real World Experience of Immunotherapy in Metastatic dMMR Endometrial cancer at a tertiary cancer center

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Background: Endometrial cancers have the highest prevalence of MSI-H/MMR deficient variants. Our study evaluates the efficacy and safety of immunotherapy in metastatic dMMR endometrial cancer.

Objectives: To analyze the response rate and survival outcome in patients with metastatic endometrial cancer receiving immunotherapy at a tertiary-center.

Materials and methods: This is a retrospective analysis of patients with metastatic dMMR endometrial cancer who received immunotherapy from Jan 2019-Jan 2024. Testing of MMR was done by IHC on tumor tissue.

Results: 58 patients were identified, 44(75%) were MMR-proficient and 14(24%) MMR-deficient. Among the 14, 11 received treatment with immunotherapy. 9 were endometroid variant, 1-high grade endometrial sarcoma and 1 had poorly differentiated carcinoma. MLH1 and PMS2 loss seen in 6 patients and 5 had MSH2 and MSH6 loss. Immunotherapy used were pembrolizumab and nivolumab. 10 received chemotherapy+immunotherapy (8 as first line and 2 as second line), one received immunotherapy as single agent first line treatment. Objective response-rate was 81%. 4(36%) had complete response, 5(45%) partial response and 2(18%) had disease progression. At a median follow-up of 20 months, mPFS was 31 months and mOS was not reached. PFS rates at 12 and 24months were 64% and 50% respectively. 24months OS rate was 78%. Adverse events mainly were hypothyroidism, fatigue and skin rash with no grade 3/4 adverse events.

Conclusion: Our patients with dMMR endometrial cancers showed remarkable efficacy and long-term outcomes. It is mandatory to check for MMR in endometrial cancer patients to identify these subgroups who do very well.

IMM 02

Pembrolizumab plus Chemotherapy as First Line Therapy for Metastatic NSCLC without driver mutations- A Real World Single Center Experience.

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Background: Immunotherapy with pembrolizumab in combination with chemotherapy is one of the standard first line treatment in metastatic non-small cell carcinoma (mNSCLC).

Objectives : This study was performed to evaluate the efficacy and safety of pembrolizumab with chemotherapy as first-line therapy in our population.

Methods: This is a retrospective study of patients with mNSCLC without driver mutations, who received treatment with pembrolizumab and chemotherapy at our center between June2019 to March 2024.

Results: 46 patients were included; of which 40(87%) were males and 6(13%) were females. Median age was 70 years. 35(76%) were adenocarcinoma and 11(24%) were squamous-cell carcinoma (SCC). PDL1 was negative in 20(43%) and positive(>1% TPS) in 26(57%) patients. Partial response was seen in 32(69%), stable disease in 8(18%) and progressive disease in 6(13%) patients. Median progression free survival (PFS) was 10 months and median overall survival(OS) was 23 months in overall population. Median OS in adenocarcinoma was 23 months and was 28months in SCC. 6 patients have completed two years of immunotherapy; have stopped treatment, and still have an ongoing response. Common grade 3 adverse events were pneumonitis in 4 patients, colitis in 1 patient. Lesser grade side effects were hypothyroidism, fatigue and skin rash.

Conclusion: Immunotherapy has shown to improve outcomes and our results of pembrolizumab + chemotherapy in the first line setting is similar to international data in efficacy and side effect profiles. The significant impact of immunotherapy is that some of the patients who respond have a durable sustained response even after stopping treatment.

IMM 03

One drug- different indications- "Inotuzumab"

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Background: Inotuzumab ozogamycin (InO) is an antiCD22 mAb approved for adults with R/R CD22-positive B-cell precursor (BCP) ALL. It can be used upfront in elderly ALL with miniHyperCVD (Phase 2 data) and in refractory Burkitt lymphoma. We present the data of InO in 4 of our patients used for 4 different indications.

Case 1: Relapsed ALL

41/F B-ALL patient relapsed (medullary and CNS) 1.5 years after completion of treatment. With InO 1 cycle+Cranial RT, attained MRD Negativity. Sibling matched AlloHSCT was performed. Flu-TBI conditioning with Cyclosporin+Methotrexate GVHD Prophylaxis. 200+ days post transplant, she is MRD Negative and no GVHD.

Case 2: Isolated Extramedullary Relapsed B-ALL

40/M ALL with t(4;11) relapsed 3 months after interim maintenance with soft tissue mass in the thigh. Biopsy from mass confirmed the relapse. Bone marrow MRD was negative. Treated with InO for 1 cycle. He had only Partial response.

Case 3: Elderly B-ALL Upfront

68/M with multiple comorbidities with CD22+ PreB ALL. NGS revealed TP53 (VAF 53.7%) and NF1 (VAF 26.92%) mutations. Post InO monotherapy 1 cycle, he was MRD Negative. He has completed 2nd cycle of InO and in remission.

Case 4: Refractory Burkitt leukemia

12/M Stage IV Burkitt Lymphoma/leukemia with malignant ascites, pleural effusion, extensive skeletal lesions in skull, ribs and vertebra. Refractory to multiple lines of therapy, treated with InO (1 cycle) +Lenalidomide +Ibrutinib +Venetoclax. He had progressive disease- treated with InO 2nd cycle- No response- died.

Conclusion: Inotuzumab is an effective drug with less complication but cost is the limiting factor.

IMM 04

Treatment related outcomes with chemoimmunotherapy in patients with mucosal melanoma: a 10-year single center retrospective study

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Background: Primary mucosal melanomas are rare, aggressive neoplasms arising from melanocytes in various anatomic locations, accounting for 1.4% of all melanomas. Unlike the rising incidence of cutaneous melanoma, the incidence of mucosal melanomas has remained stable. These melanomas present unique molecular features, diagnostic and therapeutic challenges due to their rarity, diverse origins, variable presentations, and lack of universal staging and definitive treatment options.

Methods : We conducted a retrospective cohort analysis of patients with biopsy proven mucosal melanoma, who presented to our centre between January 01, 2012, and January 01, 2022. All anatomic sites found in the hospital information system were included, which included anorectal, head and neck and genitourinary regions. Patient outcomes were calculated based on follow up from medical records, or through telephonic interviews. The primary outcome was progression free survival and overall survival.

Results A total of 50 patients, with a mean age of 52 ± 13.4 years, were included in the study. Among them, 25 (50%) were male, with 39 (78%) having mucosal melanoma of the anorectal region, 4 (8%) in the nasal and paranasal region, 3 (6%) in the lip/oral cavity or pharynx, and 4 (8%) in the vulvovaginal/penile region. Localized disease was seen in 19 (38%) patients, while 28 (56%) had distant metastasis. Molecular assays in 31 patients revealed mutations in Exon 9 of cKIT and Exon 2 of N-RAS in two patients. Treatment and follow-up data were available for 25 patients, showing a median PFS of 14.07 months and a median overall survival of 26.6 months. Overall survival was significantly better for patients who underwent surgery (39 months) compared to those who did not (14 months), with a P value of 0.01. There was no statistically significant difference in survival between patients who received radiotherapy and those who did not, and the variety of chemoimmunotherapy options precluded meaningful subgroup analysis.

Conclusion: Data on optimal management strategies for Primary Mucosal Melanomas is scarce. This study presents one of the largest datasets with treatment-related outcomes for this specific histology in India. Surgical resection followed by adjuvant radiation in early non-metastatic disease, and a combination of chemotherapy and immunotherapy for distant metastasis, appear to be the most appropriate interventions.

IMM 05

Efficacy of Low Dose Immunotherapy in Advanced Solid Tumors

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Background: Immunotherapy has shown improved results and is now the standard of care for many solid malignancies. However, only 1-3% of patients are able to take routine dose immunotherapy in resource constrained settings. According to recent studies, immunotherapy at low doses may be as efficacious as the standard recommended doses.

Objectives: To study the efficacy and safety of low dose immunotherapy in metastatic solid tumors and correlate it with progression free survival.

Methods: All metastatic solid tumor cases who have received low dose nivolumab during Jan 2022 and May 2024 and undergone at least one interval response monitoring scan are included in the study. The response variables were considered as stable disease and progressive disease. The other variables studied are Cancer type, type of immunotherapy, cycles of immunotherapy, time of progression on immunotherapy and site of progression.

Results: Fourteen patients were included in the study with a median age of 64 years. Patients included had: Head & Neck cancers(5); Lung Cancer(1); Esophageal cancer(3);Gastric cancer(2); Lymphoma(1);Urinary bladder cancer(1) and Rectal cancer(1). Median number of immunotherapy cycles received was 6.5 ;with 7 patients receiving maintenance low dose nivolumab. Median followup time was 5 months and progression free survival at 6 months was 50%. Only 1 patient developed grade 3 lymphopenia which was managed conservatively.

Conclusion: The study concludes that low dose immunotherapy is efficacious with a low toxicity profile and can be considered in resource constrained settings.

IMM 06

Immunotherapy in Stage IV solid malignancies - Real world experience from a Tertiary cancer center

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Background- Immunotherapy is a newer treatment modality in solid malignancies, improving the patient's survival by overcoming the immune evasion. Overall only 1.6 to 3% eligible solid malignancy patient receives immunotherapy in India.

Objectives: To present the experience of immunotherapy in stage IV patients.

Methods: It is a prospective observational study of all stage IV cancer patients receiving immunotherapy from Jan 2023 to April 2024. Patient's characteristics, disease and treatment details was collected in an Excel sheet and analysed using relevant statistical test. PDL-1 or MSI testing was not mandatory for patients to start on immunotherapy.

Results: This study included 44 patients, with the mean age of 58.8 years and 36% patients were above and equal to 65 years. Majority were male gender with performance status 0-1(ECOG) and 50% patients had comorbidities. Common site of malignancies were head & neck (27.3%), kidney (20.5%) and gastrointestinal(13%). 68% had received previous cancer directed treatment, only one had received immunotherapy in past. Nivolumab was commonly used, followed by pembrolizumab. Low dose was given in 72.7% patients. Average immunotherapy received was 5 cycles. Most patients tolerated well except for few with grade 3-4 toxicity. Skin itching and hypothyroidism being frequent. Response assessment was done in 23 patients, among them 15 patients showed progression. Presently 19 out of 44 patients are alive, among them 11 patients is on active treatment.

Conclusion: Immunotherapy alone or in combination was well tolerated with acceptable toxicity in most of the patients. Skin itching and hypothyroid is the common tolerable toxicity seen. Low dose can be an option in the setting of limited finances.

IMM 007

Long-term outcome in advanced Non-small cell lung cancer patients treated with immune check point inhibitors in later lines, a single centre experience.

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Background: Immune check point inhibitors (ICIs), as subsequent treatment in previously treated non-small cell lung cancer (NSCLC) patients have shown consistent survival and safety benefits in various studies when compared to chemotherapy. A significant improvement in 3 years overall survival with ICIs compared to chemotherapy alone has been demonstrated across various studies.

Objectives: To study the outcome of NSCLC patients treated with ICIs following progression on first line chemotherapy.

Material & Methods: The study comprised of NSCLC patients treated with ICIs between June 2017 to March 2024. We observed the long-term outcome with ICIs in subsequent lines following progression on platinum-based chemotherapy.

Results: The study included 34 individuals, the median age was 66 years; included 29 males (85%) and 5 females (15%). Amongst them 28(82%) had adenocarcinoma and 6(18%) had squamous cell carcinoma histology. The ICIs administered were, 20 got Nivolumab, Atezolizumab in 2 and Pembrolizumab in 12 patients. The median PFS was 8months and median OS was 15 months, with an OS rate of 26% at 36 months, patient with the longest follow up was at 72 months. Immune related adverse events (IrAEs) of grade 1-2 severity noted in 10 patients, 1 patient had Grade 3 pneumonitis.

Conclusions: ICIs have been effective in advanced NSCLC, with no additional safety signals. We observed that a subset of patients who respond can have a sustained response with few surviving beyond 3 years with ICIs even in subsequent lines. Thus ICIs remains a treatment option in later lines for immunotherapy naïve patients.

Pediatric Oncology

PED 001

Advancing Therapeutic Frontiers Stereotactic Radiotherapy (SRT) In Pediatric Diffuse Thalamic Arteriovenous Malformation(AVM)

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Background: Cerebral arteriovenous malformations (AVMs) are rare in paediatric patients, with a prevalence of 0.01% and an annual haemorrhage rate of 2-4%. These congenital lesions often result in intracerebral haemorrhage in adults but can present with various symptoms in children. Diagnosis involves computed tomography (CT), magnetic resonance imaging (MRI), and digital subtraction angiography (DSA).

Case Presentation: Presenting a case of an 11-year-old child with a known history of seizure disorder, experiencing progressive left upper and lower limb weakness and decreased speech output since 2019. Despite treatment with antiepileptic medication, the patient continued to experience seizures. Neurosurgical evaluation revealed bilateral diffuse thalamic AVM - Spetzler Martin Grade V, with a significant volume on both sides. The patient subsequently underwent SRT at our institute in May 2022, with a total dose of 2500 cGy in 5 fractions via VMAT to the nidus (84cc). Normal tissue dose constraints were achieved. The patient tolerated treatment well without adverse effects. Following SRT, the patient's condition gradually improved, with improvement in speech output and neurological function. Follow-up MRI (last in February 2024) indicated a reduction in the volume of the AVM. The patient is still on anti-epileptic medications and didn't have any further seizure episodes post treatment.

Conclusion: Stereotactic Radiotherapy(SRT) proves to be a promising non-invasive treatment modality for pediatric brain Arteriovenous Malformations (AVMs), offering favorable outcomes and minimal side effects.

PED 002

Early death in Paediatric Acute Promyelocytic Leukemia

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Background: Acute Promyelocytic Leukemia (APL) represents a distinct subtype of acute myeloid leukemia characterized by the presence of the PML-RARA fusion gene. While remarkable progress has been made in the treatment of APL, it remains a significant cause of morbidity and mortality, particularly in pediatric populations. This study aims to review the incidence and factors contributing to early death (death within 30 days of diagnosis) in pediatric APL patients.

Objectives: To elucidate the incidence and underlying factors contributing to early death in pediatric acute promyelocytic leukemia (APL) patients.

Methods: This retrospective study included patients presented to Manipal Hospitals, Vijayawada (Andhra Pradesh, India) from January 2015 to December 2023.

Results: A total of 30 patients with APL were included in this study .Out of 30 patients 18 (60%) were males and 12 (40%) were females . Patients in high risk category are 18(60%). Early death was seen in 10 patients (33.33%) with 6 females and 4 males , with 9 (90%) patients suffering high disease risk. Out of 10 deaths 7 patients died before starting treatment Major contributing factors for early death are hemorrhagic (70%).

Conclusion: Our study underscores the importance of early identification, risk stratification, and multidisciplinary management in mitigating early mortality in pediatric APL. By addressing the multifactorial determinants of early death, we can strive to improve survival outcomes and quality of life for in paediatric age group.

PED 003

Tool for an appropriate golden management in sepsis – usefulness of direct MALDI-TOF in early identification of bacteremia in febrile children with hemato-oncological conditions

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BACKGROUND: Timely initiation of appropriate antimicrobials is crucial for better outcomes in pediatric hemato-oncology (PHO) sepsis. While conventional blood culture is the gold standard for identifying microbial etiology, it typically takes 48-72 hours to report. To reduce this time, direct inoculation of microorganisms from positive blood culture bottles into the MALDI-TOF MS system has been tested. This study compares the results of direct identification using MALDI-TOF with conventional methods and assesses its feasibility in managing immunocompromised children.**OBJECTIVES OF THE STUDY:** To study the concordance between the blood culture reports by direct MALD-TOF and the conventional culture.

METHODOLOGY: This prospective study was conducted in the PHO-unit between June-2022 and July-2023 Children upto 18-years from PHO-unit presenting with fever were enrolled. When the blood culture bottles incubated in the automated system BD-BACTEC™FX signaled as positive, process for classical ID using MALDI-TOF/Conventional Biochemical was followed. In parallel, an aliquot was subjected to a lysis-centrifugation method (LCM) and used directly for the identification by the MALDI-TOF. Time to pathogen identification by direct MALDI TOF and conventional method and concurrence between the 2 methods were analyzed.

RESULTS: Among the positive blood cultures, 32 (45%) were Gram positive cocci and 31 (41.8%) were gram negative bacilli and 14.8% were Candida spp. Overall, we had 73 positive cultures by the conventional MALDI-TOF method (gold standard) and 47 positives by the new method “direct MALDI-TOF”, the concordance rate between the conventional technique and direct MALDI TOF was 54.8% and discordance was noted in 45.2% cases. Minimum time takes in conventional and direct MALDI TOF techniques were 24 hours and 4 hours, respectively.

CONCLUSIONS: Correct identification of the bacterial growth by direct MALDI-TOF was seen in 54.8% of the 73 children with bacteremia. The time to positivity by direct MALDI-TOF was significantly shorter. The concordance rate for the gram-negative bacteria (GNB) was higher than that for Gram positive cocci (GPC).

PED 004

Chronic parvovirus infection in pediatric patients with solid organ cancer – two case reports

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Background: Parvovirus B19 infection is a common transient infection in childhood, which in immunocompromised patients is known to be associated with chronic infection resulting in aplastic anemia.[1] In the oncology setting, while it can be seen with haematological malignancies, its association with solid organ malignancy is rarer.[2] Here we review two cases of parvovirus B19 infection in pediatric solid cancers, its clinical features, and impact on cancer treatment.

Objectives: To study the clinical features and impact of Parvovirus infection in pediatric solid cancers.

Methodology: The clinical and laboratory details were retrieved retrospectively from medical records

Case 1: A 6-year-old boy with high-risk neuroblastoma on induction chemotherapy developed recurrent anemia and febrile neutropenia, requiring multiple blood products, antibiotics, and Filgrastim support. He received an average chemotherapy dose of 77% (range: 66-100%) with an average delay of 7 days (range: 0-32) between cycles. A total of 30 units of packed red blood cells (PRBC) were transfused. Parvovirus B19 infection was diagnosed after the 4th chemotherapy cycle via bone marrow studies and PCR. He received three courses of intravenous immunoglobulin (IVIG) at 1g/kg and is currently transfusion-independent and in remission, awaiting a bone marrow transplant.

Case 2: A 7-year-old boy diagnosed with non-metastatic Ewing's sarcoma of the right chest wall started on induction chemotherapy. He had poor chemotherapy tolerance with recurrent anemia and febrile neutropenia, requiring antibiotics and becoming transfusion-dependent. He received an average chemotherapy dose of 68% (range: 50-75%) with an average delay of 5.5 days (range: 2-12) between cycles. A total of 21 units of PRBC were transfused. Parvovirus PCR was positive, and he received two courses of IVIG at 2g/kg. The patient is currently transfusion-independent and in remission.

Conclusion: Chronic parvovirus infection is an uncommon, but often overlooked diagnosis in immunocompromised pediatric patients with solid tumour, which can cause undue morbidity and compromise chemotherapy dose intensity, potentially affecting long term outcomes.

PED 005

Primary immunodeficiency with PIK3CD mutation – treated with Allogenic Bone Marrow Transplant- a case report

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Background : Severe combined immunodeficiency (SCID) with PIK3CD mutation affects both T and B cell function leading to recurrent infections and also associated with increased risk of lymphoma. Incidence is 1 per 10000 worldwide. Hematopoietic transplant with healthy donor stem cells replace the marrow causing durable immune reconstitution and is the curative treatment. Use of matched related donor as short engraftment time and less Graft versus host disease and transplant related mortality, with an overall survival of 85-90%.

Objectives: To present the use of Allogenic bone marrow transplant (BMT) in a non-malignant conditions like SCID

Case details: 10 year old boy with history of recurrent lung infections since 1.5 years of age was suspected and diagnosed with PIK3CD mutated SCID. Underwent allogenic BMT using reduced intensity regimen Inj Fludarabine and High dose inj Melphalan with matched sibling donor (11/12 HLA match). Inj Cyclosporine and Inj Methotrexate was given as GVHD prophylaxis. He engrafted on day +12 for neutrophils and day +13 for platelets. No major complications including acute GVHD except for grade 3 mucositis, grade 2 vomiting and grade 2 diarrhea was seen. Chimerism on day +30 was 100% and on day +100 was 94%. Presently he is on tapering dose of cyclosporine and completed more than 150 days with reduced frequency of infection.

Conclusion :Genetic testing should be considered actively for a child with recurrent infection to diagnose SCID. Allogenic bone marrow transplant is curative treatment modality using reduced intensity regimen with minimal GVHD.

PED 006

Clinico-pathological profile of children with proptosis in a Pediatric Hemato-oncological unit – a retrospective study

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Introduction: Childhood proptosis usually requires emergent intervention as it threatens the vision. Whereas Graves' disease is the most common cause in adults, orbital cellulitis and malignancies are considered the most common causes in children.

Materials and Methods: We audited the clinical and laboratory profile of children with malignant causes of proptosis presenting to Pediatric Hemato-Oncology Unit with a retrospective study between January-2017 to December-2023. All children were managed in consultation with the ophthalmology unit at Sankara Nethralaya Hospital. After the clinical evaluation, lab investigations and imaging were done. Least invasive mode of diagnosis from accessible sites, other than orbit was planned. Multidisciplinary meeting between oncologist/ophthalmologist/radiologist and radiation oncologist decides management. Demographic data, investigations, diagnosis, treatment and outcomes were analysed.

Results: We had 101 children with proptosis including 58(57.6%) boys. Mean age group was 6.1 years. Unilateral involvement was seen in 79(78.1%) and 22.8% had bilateral involvement. Most common cause of proptosis in our cohort was Optic glioma in 38(37.6%) cases followed by Retinoblastoma in 15(14.8%) and Acute myeloid leukaemia in 10(9.9%). Diagnosis was made by clinical/radiological means in >50% cases, through bone marrow aspiration/lymph node biopsy in 16%; with only 34(33.6%) requiring orbital biopsy. Management included Chemotherapy in 96(95%), Radiotherapy in 26(25.7%) and Surgery in 4(3.9%). In our cohort,75(74.2%) is disease-free at 1-year follow-up and mortality was noted in 12.9%.

Conclusion: Proptosis in children usually reflects a serious problem and needs emergent intervention. Malignancies should be considered in differentials in children. Prompt referral, least-invasive modes of diagnosis and multidisciplinary management are the keys to successful outcomes.

PED 007

Autonephrectomy: A Phenomenon in Operated Neuroblastoma with Renal Blood Vessel Encasement

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Background: Neuroblastoma, the most common extracranial pediatric tumor, accounts for 5–8% of all childhood cancers. Originating anywhere along the sympathetic chain, it most frequently arises from the adrenal gland. The treatment for localized neuroblastoma typically involves surgical resection, which can be complicated by the tumor's infiltration of surrounding organs and critical vessels. This complication, resulting from injury to the renal vasculature rather than the kidney itself, may only become apparent months after surgery when follow-up imaging reveals a diminutive or absent kidney.

Aim: This study aims to evaluate the incidence of autonephrectomy following surgery for adrenal and retroperitoneal neuroblastoma involving renal blood vessel encasement.

Materials and Methods: This single-center observational study is a retrospective analysis of a prospectively collected database from January 2015 to December 2023, with a median follow-up period of 2.5 years. Patients with intra-abdominal neuroblastoma treated according to the CCG 3891 protocol, who underwent suprarenal or retroperitoneal mass excision, were included. The inclusion criteria were: Suprarenal neuroblastoma with or without retroperitoneal nodal mass and Neuroblastoma with retroperitoneal nodal mass. The exclusion criteria were: Neuroblastoma of other subsites/ Intra-abdominal neuroblastoma other than suprarenal or retroperitoneal./Patients deemed inoperable intraoperatively.

Results: Out of 93 neuroblastoma cases, 78 were intra-abdominal. Among these, 72 had suprarenal neuroblastoma (with or without retroperitoneal nodal mass), 5 had retroperitoneal nodal mass alone, and 1 had a presacral mass. A total of 41 intra-abdominal neuroblastoma cases underwent surgery, with 40 included in the study after excluding one patient with inoperable disease. Among the 40 patients, 14 (35%) had notable renal vessel encasement. Of these, 2 patients required intraoperative nephrectomy for complete resection due to dense adhesion to the renal artery. Among the remaining 12 patients, 4 (33.3%) experienced autonephrectomy within an average of 3.25 months post-surgery. The other 8 patients (66.7%) had both kidneys preserved, despite extensive dissection and handling of renal vessels during surgery.

Conclusion: The study highlights the significant risk of autonephrectomy in patients undergoing surgery for neuroblastoma with renal vessel encasement. Close postoperative monitoring is crucial to identify and manage this complication.

PED 008

Effect of Multi-modal Treatment approach on Primary Malignant Paediatric and Adolescence Central Nervous System Tumours- A Two-decade Retrospective study

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Background : This research sought to investigate the demographic characteristics, histopathological profile, treatment, and survival of paediatric and adolescent patients diagnosed with primary malignant Central nervous system (CNS) tumours.

Methodology : Data was obtained from the Department of Medical Oncology between September 2001 to May 2023, consisting of patients aged 0–19 years who were diagnosed with malignant primary brain tumours (PBT), as confirmed by radiological or histological examination. Patients with metastatic CNS disease were excluded. The Kaplan-Meier method was used to estimate overall survival (OS) and relapse-free survival (RFS).

Results: Among 251 PBT patients, 54.6%(n=137) were males, and 45.4%(n=114) were females, with a mean age of 9.1±5.54 years. The common histological diagnosis was medulloblastoma(n=57;23%), brainstem glioma (n=36;14.5%), GBM (n=23;9.27%), low-grade glioma (n=44;17.7%), and others. Surgical resection was achieved in 69.5% of patients and the extent of resection had a significant impact on OS (p=0.001). Radiotherapy was given to 95% of patients with curative intent, and 5% with palliative intent. Chemotherapy was given to 77 patients, with 5 patients receiving neoadjuvant treatment for germ cell tumours. The OS of all PBTs was 141±7.9 months with 1-,2-,5-, and 8-year OS rates of 79%,70%,61%, and 60% respectively. Medulloblastoma had 1-,3-, and 8-year OS rates of 81%,72%, and 65% respectively. 1-and 2-year OS rates for GBM patients were 46% and 9.7% respectively, while brainstem glioma has 1-and 1.6-year OS rates of 45% and 13.5% respectively. Patients with embryonal tumours (ET) had better RFS, with a mean survival of 133.6±12.7months ($p<0.001$).

Conclusion: The prognosis for ETs is more favourable than that of glial tumours. A greater extent of resection is associated with improved OS. Medulloblastoma, being a chemo sensitive tumour, benefits greatly from a multimodal approach and shows the most significant improvement from systemic treatment. Despite undergoing concomitant chemo-radiation in addition to surgery, the prognosis for GBM remains poor.

HEMATO ONCOLOGY

HEM 001

Extramedullary Myeloma – A Master of Disguise A Laryngeal Hangout

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Introduction: Macrofocal multiple myeloma is a rare entity of plasma cell dyscrasia characterised by more than two plasmacytomas with no other evidence of any myeloma defining events with negative immunofixation studies (both in the serum and the urine) and a normal bone marrow. Our case gives an insight into this less visited world of plasma cell Neoplasms and hence helping in early diagnosis and management.

Objectives: Approach and management of Macrofocal multiple myeloma.

Material & Methods: We present the case of a 58 year old man , who presented with change in voice and dysphagia. Examination revealed cervical lymphadenopathy and proliferative growth in the epiglottis. Biopsies (including Immunohistochemistry) done both on the Cervical lymph node and epiglottic mass reveal the presence of sheets of plasma cells with Kappa light chain restriction. Imaging revealed the presence of multiple subpleural pulmonary nodules. There was no other Myeloma-defining events that were seen in our patient including a normal bone marrow examination.

Results: The patient was started on VRD regimen and after 3 cycles of therapy , there has been marked reduction in the cervical nodal swelling with improvement in voice of the patient from before. Our plan is to complete 6 cycles of VRD chemotherapy and then to perform reassessment of the disease and then plan accordingly.

Conclusions: Macrofocal Multiple myeloma or Multiple solitary lasmacytomas(MSP) is a rare plasma cell dyscrasia , characterised by multiple lesions of neoplastic monoclonal plasma cells. Because of its rarity and heterogenous presentation , no clear guidelines are available for MSP treatment. Chemotherapy radiotherapy & surgery have been tried with variable results..

HEM 002

Aleukemic Leukemia Cutis- A Rare Presentation Of Acute Myeloid Leukemia

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Background: Aleukemic leukemia cutis (ALC) is a rare condition that is characterized by the invasion of leukemic cells into the skin which precedes the leukemic infiltration of both peripheral blood and bone marrow. It is seen in 7% of all Leukemia Cutis cases.

Objective: We present a case of ALC who initially developed skin lesions with no leukemic bone marrow involvement.

Case report: A 35 year old male presented with papular skin lesions on face and back of 1 month duration. On examination he had generalised lymphadenopathy, hepatosplenomegaly and bilateral testicular swelling. He was evaluated outside with peripheral blood and bone marrow studies which showed normocytic normochromic picture with no leukemic blasts. Blood and bone marrow studies showed leucocytosis of 30000, thrombocytopenia anemia and Acute leukemia picture with 70% blasts. His flow cytometry was positive for CD45, CD123, CD38, CD4, CD56, CD13, CD33, HLADR, CD36, CD64 and CD15 which confirmed the diagnosis of Acute Myeloid Leukemia with Monocytic differentiation. Skin biopsy of the papular lesions also confirmed the same. There was a 1 month latent period between leukemic skin lesions and appearance of blasts in bone marrow. The patient was in Tumor Lysis Syndrome(TLS). Although he received appropriate treatment for TLS, he succumbed to death.

Conclusion: ALC portends a poor prognosis. High degree of clinical suspicion and rapid diagnosis with skin biopsy are fundamental to improve ALC outcomes.

HEM 003

A single center Retrospective cohort study of patients with Chronic Lymphocytic Leukemia on Watchful Waiting

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Background: Chronic lymphocytic leukemia(CLL) is relatively uncommon in India. With the use of clinical prognostication scores, majority of CLL patients are put on wait-and-watch approach. With improved access to cytogenetic and molecular testing, the number of patients out on waitful watching approach increases and remains a better use of finances in a resource-limited setting.

Objectives: To describe clinical follow up of a cohort of patients diagnosed with CLL Stage 0/1 at a single center in the last 5 years.

Methods: A retrospective and prospective observational cohort study, at a single center of patients diagnosed with CLL RAI Stage 0/1 from 2018-2024. Data was accessed from internally maintained disease database and from original outpatient files. All patients with CLL who had a baseline flowcytometry, clinical staging and cytogenetic studies were taken. Patients with RAI stage 0 and 1 were followed up for clinical events of significance and need for starting therapy at a later stage.

Results: 25 patients were diagnosed with CLL RAI stage 0/1 at our center from the year 2018 to 2024. Median age at diagnosis was 68 years. All patients were willing to undergo cytogenetic evaluation at baseline. 30% patients required treatment in view of high risk cytogenetics, even though clinically staged at RAI Stage 0 or 1. 3 patients were lost to follow-up.

Conclusion: Cytogenetic prognostication of CLL patients is an effective use of resources and provides a meaningful wait-and-watch approach for CLL stage 0/1 patients.

HEM 004

Real world experience in management of rare HIV associated ExtraCavitary Primary Effusion Lymphoma

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Background: Primary effusion lymphoma is a very rare HIV associated lymphoma accounting for 1-4% of HIV associated lymphomas, presenting with effusion in the body cavities. Extra cavitary presentation of primary effusion lymphoma is rare and account for less than 30% of cases.

Objectives: Owing to rarity only case reports are available for guiding management and no definitive recommendations exist for management. The prognosis at the outset is poor with a limited median overall survival and shorter remissions and refractory disease. Here we present real world experience in management of a case of extra cavitary primary effusion lymphoma in a tertiary care setting.

Case report: 48 year old female whose husband was retro viral disease positive, presented post dental extraction with progressive acute onset swelling of left jaw. History of loss of weight and appetite were present. Biopsy from the lesion revealed high grade B cell NHL.IHC revealed HHV+ primary effusion lymphoma. Staging workup revealed stage four disease. Patient was treated with CHOP chemotherapy and anti-retroviral treatment. Post 6 cycles of treatment patient attained complete remission. She is on follow up.

Conclusion: There are no consensual guidelines available for management of primary effusion Lymphoma and cases should be managed in a case-by-case basis. HHV positivity differentiates it from plasmablastic lymphoma which is also a HIV associated lymphoma. Our patient had improved outcomes when compared with historical data of median OS of 6 months.

HEM 005

A Dangerous Malady Of the Thyroid – various presentations of Thyroid Lymphoma a single centre experience

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Background: Acute onset rapidly progressing swelling in the neck can become a life threatening emergency due to its location near the essential structures. Primary thyroid lymphoma is one such very rare thyroid malignancy and a rare Lymphoma.we here describe a series of three cases of thyroid lymphoma.

Objectives: Ewing to rarity few randomized studies are available for diagnostic and therapeutic management. The prognosis of patients depends on the patient's condition, histological classification of the tumour and the stage of the disease. Here we describe a series of three cases of thyroid lymphoma with varying management and outcomes.

Case report :A 70 year old male with dysphagia and stridor was managed with emergency cricothyroidotomy. Imaging revealed multiple nodules in right lobe of thyroid with homogeneous enhancement ,Histopathological examination of the surgical specimen revealed the presence of a Diffuse Large B Cell Lymphoma of the thyroid.48 year old female evaluated for neck swelling and hypothyroidism underwent thyroid surgery for multinodular goitre, pathology revealed Hashimoto's disease, thyroid swelling recurred and slide review clinched diagnosis of DLBCL.67 year male underwent surgery for multinodular goitre , and later pathological diagnosis of DLBCL was made, patient responded well to treatment.

Conclusion: There are no consensual guidelines available for management of Thyroid Lymphoma and cases should be managed in a case-by-case basis. Median age group of the disease is in the geriatric population with exceptions.

HEM 006

A Rare case of CD-56 negative NK T Cell Lymphoma: A Case report

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Background: Extranodal NK/T cell lymphoma, nasal type, is a rare and aggressive lumphoma with predilection for upper aerodigestive tract and may mimic benign sinonasal conditions posing diagnostic challenge. We present here a case of a CD-56 negative ENKTCL which is unusual as it is typically expressed in NK- T cell.

Case Presentation: A 55/M presented with a history of recurrent sinusitis and diagnosed as recurrent angiofibroma on repeated biopsy samples outside. Rebiopsy from nasal mass and IHC confirmed ENKTL Nasal Type. IHC reported negative for CD56. EBER(ISH), Granzyme B and cCD3 positivity confirmed diagnosis. PET CT suggested Stage I disease and stratified as PINK Index-low risk. Started on sandwiched chemoradiation with P-GEMOX 1 cycle. Unwilling for further chemotherapy, Patient was treated with only RT . Post RT completion, PET CT suggested partial response with a residual mass in nasal cavity biopsy of which came out to be negative suggesting complete response to therapy.

Conclusion: This case highlights the diagnostic and therapeutic challenges posed by CD-56 negative NK/T cell lymphoma. Multiple biopsy might have to be analysed before definite diagnosis can be made as extensive necrosis seen in biopsy samples. Clinicians should maintain a high index of clinical suspicion in refractory cases, especially when atypical features, such as CD56 negativity, are observed. Timely diagnosis, is crucial for achieving favourable outcomes.

HEM 007

Infectious profile and outcome in autologous hematopoietic stem cell transplant in a South Indian institution.

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Introduction: Hematopoietic stem cell transplant is widely used in treatment of haemato-oncology. The principle is High dose chemotherapy followed by stem cell rescue. Infection is the 2nd most common cause of mortality in patients undergoing transplant.

Aim: Aim of this study is to analyse the infectious epidemiology during the course of Autologous stem cell transplant.

Method: We conducted an observational study between May 2022 to May 2024. A total of 50 patients undergone ASCT, out of which 28 had diagnosis of plasma cell disorders and 22 had diagnosis of lymphoma.

Result: The mean age of diagnosis was 41.6 years (Range 16-62). A total of 61 febrile neutropenia episodes were observed during transplant. Febrile neutropenia was more common in patient with prolonged neutropenia and grade 2/3 mucositis. Culture positivity rate was 44.2%, with blood culture positivity rate of 8.19%. The most common site of infection was pneumonia followed by colitis, Throat infection and protozoan infestation. Gram positive infections were more common as compared to gram negative. Common bacterial organisms were MRSA followed by Klebsiella, Haemophilus, pseudomonas. The mean days of neutrophil engraftment, platelet recovery and hospital stay in total patients were 11.8days, 12.1days and 19.0days respectively. In lymphoma patients the recovery and hospital stay were delayed as compared to myeloma patients. 12 patients developed septic shock during transplant. No patient died during the transplant due to infection.

Conclusion: Gram positive infections were common. Mucositis and neutropenia duration were common risk factors. Periodic program in handling CVP line Led to decrease in catheter related infection.

HEM 008

Feasibility of DA-R-EPOCH in Resource Constrained Setting – A Clinical Audit

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Background: DA-R-EPOCH regimen has been identified as a potential replacement for R-CHOP in high-risk DLBCL and other high-grade lymphomas. Dynamic dose adjustments according to patient's bone marrow status allow for the use of the highest acceptable doses of drugs, while avoiding additional toxicity and improving the results. However, because of the 96hrs continuous infusion and the aseptic management of central line, patient need a special care during the chemotherapy followed by frequent assessment for known cytopenia and other toxicities after chemotherapy. Making DA-R-EPOCH difficult to practise in the resource-limited setting.

Objectives: To assess the feasibility of DA-EPOCH-R in a resource constrained setting.

Methods: Data was collected on patients with high grade lymphoma who were treated with DA-R-EPOCH under general ward setting for the last 2 years, in regards of patient's demographic details, chemotherapy and toxicities.

Results: Toxicities were assessed in all 12 patients. All patients had central Line catheterization (PICC/PORT/JV). Eight patients completed all treatment cycles. Eight patients underwent at least one dose escalation and four patients achieved maximum dose escalation(Level III). Overall, Nine patients had febrile neutropenia. One patient had culture positive from central line. No patient had CLABSI or central line rupture or removal of central line. Packed red cell transfusions were administered to 2 patients. No patient had Grade ¾ Gastrointestinal toxicity. Grade 2 Sensory neuropathies occurred in 1 patient. No patient had TRAE Grade 3/4. One patient died from progressive disease during the first cycle.

HEM 009

The Hidden Lymphoma: A Case of Subcutaneous Panniculitis-like T-Cell Lymphoma Misdiagnosed as Tuberculosis

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Background: Subcutaneous panniculitis-like T-cell lymphoma (SPTCL) is a rare form of non-Hodgkin lymphoma characterized by malignant T-cell infiltration into subcutaneous adipose tissue, often misdiagnosed as benign conditions like panniculitis or tuberculosis. Its clinical presentation, including nodules, plaques, or ulcerations, predominantly on the extremities and trunk, leads to frequent misdiagnosis, delaying appropriate treatment.

Objectives: This study aims to highlight the diagnostic challenges of SPTCL, emphasize the importance of histopathological and immunohistochemical evaluation, and advocate for increased clinical awareness to prevent misdiagnosis and ensure timely treatment.

Methods :A case study of a 36-year-old female misdiagnosed with tuberculosis is presented. She exhibited subcutaneous nodules with systemic symptoms and was treated with anti-tubercular therapy (ATT). Due to persistent symptoms and new nodules, further evaluation, including PET-CT and excision biopsy, was conducted. Histopathological and immunohistochemical analyses confirmed SPTCL.

Results: The initial misdiagnosis led to delayed treatment. Histopathological evaluation revealed atypical lymphoid cells expressing T-cell markers (CD3, CD8, TCR αβ) and lacking CD4, CD56, and TCR γδ, distinguishing SPTCL from other T-cell lymphomas. The patient received three cycles of CHOP chemotherapy, followed by three additional cycles with etoposide. Post-treatment PET-CT showed significant improvement with most lesions resolving.

Conclusion : This case underscores the need for high clinical suspicion and thorough diagnostic approaches for timely management of SPTCL. Increasing clinician awareness about SPTCL can prevent misdiagnosis and ensure early, effective treatment, significantly improving patient outcomes.

HEM 010

A Rare case of Hairy Cell Leukemia Variant Masquerading as Acute Leukemia

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Background: Hairy cell leukemia variant (HCL-V) is an uncommon disorder accounting for approximately 0.4% of chronic lymphoid malignancies and 10% of all HCL cases.

Objective: The purpose of the report is to present a rare case of HCL-V which is a distinct clinico-pathological entity with intermediate features between classical Hairy Cell Leukemia (cHCL) and B-cell prolymphocytic leukemia

Case Report: A 58 year old man presented with pain abdomen, fever and loss of weight. On examination he had massive splenomegaly. Peripheral smear showed blast like cells. On flow cytometric analysis, these cells were positive for CD11c, CD19 and CD103. Based on the clinical, peripheral smear, bone marrow and flow cytometry findings, a diagnosis of hairy cell leukemia variant was confirmed.

Conclusion: It is necessary to accurately diagnose and differentiate cHCL, HCL-V and Splenic Marginal Zone Lymphoma entities, because they have different clinical and biological features, particularly with regards to the management aspect of their response to the purine analogue-based treatment, BRAF inhibitors and splenectomy.

HEM 011

Rosai-Dorfman Disease Mimicking Colorectal Malignancy

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Objectives: Rosai-Dorfman disease (RDD), otherwise known as sinus histiocytosis with massive lymphadenopathy, is a rare, benign self-limiting histiocytic proliferation that can affect any organ system in the human body. Occasionally, the presentation of RDD may overlap with more alarming malignant processes, leading to unique diagnostic challenges.

Case Report: We present a case of a 65-year-old male incidentally diagnosed with a large, presacral mass with c/o difficulty in passing stools. Minimally invasive diagnostic techniques, including serial imaging, endoscopic biopsy, and CT-guided fine-needle aspiration, could not confirm etiology. Ultimately, the patient underwent surgical excision via WLE + low-anterior resection + Diversion ileostomy . Immunohistochemical staining confirmed the diagnosis of RDD.

Conclusion: RDD remains a unique clinical entity in its ability to affect most organ systems indiscriminately. Despite its benign nature, manifestations of RDD may mimic malignant disease. RDD can affect any portion of the gastrointestinal tract but may present as a concerning obstructing mass if involving the colon or rectum. The clinical course is mostly self-limited, and simple excision is usually curative. Treatment options for diffuse disease include steroids, immunosuppression, and, in some cases, systemic chemotherapy.

HEM 012

Ease of application and reproducibility of IMPeTUs crieria in diagnosis and reassessment of Multiple Myeloma in a pragmatic setting

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Background: There are no standard interpretation criteria have been proposed for FDGPET-CT evaluation in Multiple myeloma (MM) patients. The Italian Myeloma criteria for PET Use (IMPeTUs) aims to standardize FDGPET-CT evaluation in clinical settings. In the light of proposed new criteria, it is essential to assess feasibility of its application in routine practice.

Methodology: A two-year, single-centre, non-randomized study evaluated the effectiveness of PET-CT in diagnosing and reassessing MM in clinical settings. The study included newly diagnosed MM patients who underwent PET-CT evaluation pre-and post-induction chemotherapy and used bone marrow aspiration, a trephine biopsy, baseline FISH analysis. Utilizing IMPeTUs criteria, two nuclear medicine experts independently reviewed PET-CT imaging and reported their findings.

Results: A total of 21 patients were included, a strong positive correlation was found between bone-marrow(BM) Plasmacytosis and standard uptake value(SUV)max of BM in PET-0 ($r=0.764;p<0.001$) and PET-1($r=0.695;p<0.001$). There was a moderate positive correlation between serum ALP and number of lytic lesions on PET-0($r=0.516;p=0.017$) whereas strong positive correlation on PET-1($r=0.862;p<0.001$). There was a significant correlation between Beta2-Microgloubulin and burden of Extramedullary disease on PET-0($p=0.016$) but it is not same with LDH($p=0.918$). Between PET-0 and PET-1 there was a substantial agreement between both observers for BM Deauville score(Kappa-0.790;0.781) and almost perfect agreement for focal lesions(Kappa-0.931;0.821), lytic lesions(Kappa-0.923;0.933),fractures(Kappa-1.0;1.0). For para medullary lesions, both observers had moderate agreement(0.462) on PET-0 and negative agreement(-0.05) on PET-1 whereas for the extramedullary lesions, there was a good agreement at PET-0(0.814) and moderate agreement(0.462) at PET-1.

Conclusion: The clinical and PET-CT parameters exhibit a strong correlation. The evaluation of inter-observer variability among nuclear medicine physicians using IMPeTUS criteria was found to be highly reproducible, and there was good agreement between the two observers; hence, it can serve as a baseline tool for harmonizing PET interpretation in MM.

HEM 013

TPMT assay in Acute Lymphoblastic Leukemia patients in Government Rajaji hospital

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Background: 6-Mercaptopurine (6-MP) is used to treat acute lymphoblastic leukemia (ALL) by metabolizing into thioguanine nucleotides (TGN), which incorporate into DNA and RNA to exert cytotoxicity. It is metabolized via S-methylation by thiopurine methyltransferase (TPMT) to methylmercaptopurine (meMP) or oxidation to thiouric acid by xanthine oxidase. High TPMT activity reduces TGN activation, leading to lower TGN accumulation and potential hematopoietic toxicity in TPMT-deficient patients unless the dosage is reduced.**Objectives:** The present study looks at TPMT activity in Acute Lymphoblastic leukemia patients treated in Government Rajaji Hospital using High Performance Liquid Chromatography based enzyme assay to assess ethnic variation of TMPT activity and the asssociation between TPMT levels and occurence of neutropenia in ALL patients treated with 6-MP

Study Procedure: Blood sample will be collected from all Acute lymphoblastic leukemia patients before initiation of treatment. TPMT enzyme level will be tested based on the principle of TPMT catalyzed conversion of 6-MP to 6-MMP using SAM as the methyl donor. The amount of 6-MMP produced depends on the TPMT enzyme activity in the processed patient's blood specimen. One unit of TPMT activity represents the formation of 1 nmol of 6-MMP/1.5 h of incubation. The quantification of 6-MMP will be performed by an isocratic HPLC assay.The enzyme activity will be normalized per hour per milliliter of packed erythrocytes. Patients will be monitored to document the prevalance and severity of neutropenia during 6-MP treatment

Results: 30 PATIENTS has been followed out of which 10had low TPMT LEVELS. Out of 10 Patients who had low TPMT levels 8 developed nuetropenia during the course of chemotherapy (2- grade II nuetropneia ,2-grade III nuetropenia ,4 had grade IV nuetropenia), Out of 8 Patient -6 recovered and 2 patient expired.

Conclusion: Severity of hematological toxicities during the course of treatement depends on TPMT levels and hence its a reliable predictor of anticipating severe hematological toxicities monitoring Patient survival.

HEM 014

Loss of CD 20 antigen expression in Follicular Lymphoma

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Abstract: CD20-targeted therapies such as rituximab are widely used in the management of B-cell non-Hodgkin lymphoma (NHL). Re-treatment with anti-CD20 agents at the time of relapse is common, however previous research has demonstrated loss of CD20 expression at time of relapse or refractory disease in a subset of patients. This fact should be considered carefully, since almost all second line protocols are based on administration of high dose therapy with rituximab with chemotherapy (R-ICE and R-DHAP) before proceeding for transplant . We describe a case of CD20 positive follicular lymphoma initially which progressed with the loss of CD20 antigen expression after an R-CHOP regimen and maintainance Rituximab. Here we present 42 year old woman who is known diabetic and hypertensive with ECOG -01 presented with bilateral multiple cervical lymph node swelling. On further investigation LDH -516 IU/L, whole body PET-CT contrast showed FDG avid bilateral cervical, infraclavicular, axillary, multiple mediastinal, abdominal, bilateral iliac lymph nodes with diffuse splenic involvement. Lymph node biopsy suggested Non Hodgkin Lymphoma custom IHC showed CD 20^{+}, CD 10^{+}, bcl-2 positive and bcl-6 inconclusive, ki-67-3% was diagnosed of follicular lymphoma with FLIPI -04 , high risk, stage III. Patient was treated with 6 cycles of R-CHOP was given every 21 days. Interim Contrast PET-CT after 6 cycles of RCHOP showed no abnormal metabolic activity noted anywhere in body. Maintainance Rituximab every 2 monthly for 2 years was planned and after seven cycles, patient presented with swelling 2x1 cm solitary lymph node was noted on left side of neck, left side, biopsy turned out to be Non Hodgkin Lymphoma, custom IHC bcl-2 positive,bcl-6 positive, CD10 positive, PAX-5 positive, CD 20 negative. Patient has been explained regarding time and need of treatment until then observation. This case shows the loss of CD20-antigen expression with relapse.

HEM 015

Blastic Plasmacytoid Dendritic Cell Neoplasm: A Case Report of a Rare Leukemia

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Background: Blastic plasmacytoid dendritic cell neoplasm (BPDCN) is a rare and aggressive hematologic malignancy, constituting only 0.44% of all hematologic cancers. It commonly affects elderly males and often presents with nonspecific cutaneous lesions that can rapidly progress to systemic involvement.

Objectives: This case study aims to illustrate the diagnostic challenges of BPDCN, highlight the importance of specific diagnostic tools, and assess the efficacy of current treatment protocols.

Methods: A 17-year-old male presented with skin lesions, fever, and pancytopenia. Initial investigations included blood tests, bone marrow examination, and flow cytometry. Histopathological examination and immunohistochemical analysis confirmed BPDCN. The treatment regimen included HYPERCVAD chemotherapy, followed by plans for allogeneic bone marrow transplantation (BMT).

Results: The patient was diagnosed with BPDCN after presenting with cutaneous lesions and systemic symptoms. Flow cytometry identified blasts positive for CD2, CD4, CD56, CD123, and other markers indicative of BPDCN. After two cycles of HYPERCVAD (Phases A and B), the patient achieved hematologic and cytologic remission and was prepared for allogeneic BMT.

Conclusion: BPDCN, despite its rarity, necessitates high clinical suspicion and the use of specific immunohistochemical markers for accurate diagnosis. The HYPERCVAD regimen, followed by allogeneic BMT, has shown promising results. Increasing awareness and education about BPDCN among clinicians are crucial for timely diagnosis and treatment, thereby improving patient outcomes.

HEM 016

Total Skin Electron Beam Therapy in Primary Cutaneous T-Cell Lymphoma: A Retrospective Single Institutional Study from South India

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Background: Primary cutaneous T-cell lymphomas (PCTCL) represent a subset of non-Hodgkin's lymphomas primarily affecting the skin, with Mycosis Fungoides being the predominant subtype. Mycosis fungoides is an extremely radiosensitive malignancy. Total skin electron beam therapy (TSEBT) is a highly effective treatment option, yet data regarding its efficacy in India are limited.

Objective: This retrospective observational study aimed to evaluate overall survival (OS) and progression-free survival (PFS) in patients with PCTCL treated with TSEBT.

Materials and Methods: Data were retrospectively collected from electronic medical records of patients with PCTCL treated with TSEBT between March 2005 and September 2016. OS and PFS were calculated using the Statistical package for the social sciences software.

Results: The study included 15 patients, with a slight male predominance (53%). Common presenting symptoms included itching and maculopapular rash. Most patients were classified as stage IB or IIB, followed by stage IV. TSEBT was administered using either intermediate-dose (13.3% patients) or conventional-dose RT schemes (86.6% patients), with a six dual-field technique. Clinical complete

response was documented in 12 and partial response in 3 patients. Median OS was 65 months and median PFS was 28 months, with a median follow-up of 12 years. The 5-year OS rate was 40%.

Conclusion: This study underscores the efficacy and tolerability of TSEBT in the treatment of PCTCL, reaffirming its role compared to other treatment modalities and novel agents. TSEBT remains an efficient therapeutic option for primary cutaneous T-cell lymphoma.

HEM 017

Primary Non Hodgkins Lymphoma of the Kidney- A Retrospective Study

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Background: Primary lymphoma of genitourinary system is rare as these organs do not contain lymphoid tissue. Primary renal Non Hodgkins lymphoma (NHL) is a rare entity. This study aims at determining the clinical profile and treatment outcome of patients diagnosed with Primary renal NHL.

Materials and methods: This is a retrospective study of eight patients with Primary lymphoma of kidney diagnosed and treated in the Department of medical oncology at Regional Cancer Centre, Trivandrum.

Results: The median age was 58 years with six males and two females. Most common presenting symptoms were abdominal pain(5),abdominal mass(3) and haematuria(1).The median duration of symptoms were two months. Four patients had B symptoms. Radiological evaluation showed poorly enhancing or hypoechoic masses, directly involving kidneys and surrounding structures. The histological subtypes were DLBCL(5), Plasmablastic lymphoma(1),B-cell lymphoblastic lymphoma(1)and Follicular lymphoma(1). Four patients were in stage I, three in stage II and one in stage III. Two patients underwent nephrectomy. Seven patients received combination chemotherapy with COP±R(2), CHOP±R(4),and BFM-90(1). One patient expired before initiating chemotherapy. Two patients received radiotherapy. Three patients were alive at six years, eight years and eleven years respectively.

Conclusion: Primary renal lymphoma is extremely rare and aggressive tumour occurring predominantly in males. DLBCL is the predominant histology. Early diagnosis and prompt systemic treatment based on histology may give favourable outcomes.

HEM 018

Rare case primary Gastric Lymphoma in HIV positive patient

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Background: Primary gastric diffuse large B-cell lymphoma (PG-DLBCL) is a rare gastric malignant neoplasm.NHL in HIV is common but primary gastric lymphoma is extremely rare. The management of PG-DLBCL is same as DLBCL. But HIV-DLBCL patients have increased chemotherapy related toxicity, shorter remissions on chemotherapy and increased risk of infections. Here, presenting a rare case of PG-DLBCL in HIV infected 29 year male, focused on the clinical manifestations, diagnosis and management of primary gastric DLBCL in HIV patient.

Case presentation: A 29 year old gentleman presented with epigastric pain for 6 months.Diagnosed HIV +ve on TLD regimen. UGIE showed duodeanl ulcer, biopsy and ihc confirmed DLBCL. PET CT showed mass lesion in pylorus and duodenum and liver lesions in segment 5 and 8. After, 2 cycles of COP, patient's symptoms improved. Then, patient developed abdomen pain and jaundice. Lft revealed direct hyperbilirubinemia with normal enzymes. MRI abdomen showed large periportal nodal mass leading to CBD obstruction and IHBRD. ERCP stenting unsuccessful. Palliative RT 30Gy to porta hepatis given. Bilirubin level gradually reduced. Patient continued with R-COP. Patient improved clinically and symptomatically. After 5 cycles patient developed severe pneumonia with respiratory failure and MODS patient succumbed.

Conclusion:PG-Dlbcl is difficult to diagnose. Hiv patients dlbcl have increased drug toxicities, shorter remission period and increased risk of infection. multi-disciplinary team (MDT) model of diagnosis and treatment should be helpful for better clinical outcome.

HEM 019

Allogenic Stem Cell Transplantation In Chronic Myeloid Leukemia Patients- A Single Centre Experience From South India

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Background: The indication for transplant in Chronic Myeloid Leukemia patients in TKI era is limited. There is only limited data from resource constrained settings. We present our experience of HSCT in CML patients.

Methods: Medical records of CML patients who underwent transplant at our centre between 2017 to 2022 were taken and descriptive statistical analysis was done.

Results: Total of seven CML patients were included with median age of 37 years (31-39). Five had blast crisis, 1 each in chronic and accelerated phase intolerant to multiple TKIs. 1/5 myeloid blast crisis patient was treated with Decitabine+Venetoclax+Dasatinib. 3/5 had myeloid blast crisis treated with 7+3 induction with Cytarabine+Daunorubicin along with TKI in two and only Decitabine+dasatinib in one. 1/5 had lymphoid blast crisis treated with steroid +vincristine+dasatinib. 2 patients had TKD mutations. Dasatinib and nilotinib were given in 4 and 3 patients respectively. All patients had morphological Complete Remission before HSCT. The mean time to transplant after the diagnosis of blast crisis was 4.5 months (4-5 months). Matched Sibling Donor (MSD) transplant and Haploidentical transplant was done in 3 and 4 patients respectively. Myeloablative conditioning with PBSC was used in all. The median CD34+ stem cell dose was 8.28 x 10^6 cells/mm^3 (6.5-9.5 x 10^6). PTCy was given on days +3 and +4 in HaploHSCT patients. Post HSCT TKI maintenance was given in all. Acute GVHD (liver) developed in two, treated with steroids and etanercept. 1/2 had acute liver GVHD succumbed. 4 and 1 patients had Chronic skin and musculoskeletal GVHD respectively. 1 had CNS and medullary relapse, succumbed to illness. Five patients survived with a median follow up duration of 18 months (10- 71 months).

Conclusion: Achievement of remission is critical for better survival outcomes in CML patients with Blast crisis. Outcome of these patients without HSCT is dismal. Both Matched Sibling Donor and Haploidentical HSCT results in improved survival outcomes in CML Blast crisis patients.

HEM 020

Is Rituximab Induced Lung Toxicity-A Rare Incident?

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Background: Rituximab is an IgG monoclonal antibody used in the treatment of CD20 expressing B cell lymphomas which improved the response rates, progression free survival and overall survival. Commonly associated with acute hypersensitivity reactions, but also causes lung toxicities like Pneumonitis. Overall incidence of lung toxicity due to rituximab ranges from 5-22%.

Objective: To present three cases of rituximab induced lung toxicity over the period of 2 years

Methods: Retrospectively collected from the electronic medical records

Case details: Three cases of rituximab based pneumonitis were seen in 59yrs, 29 yr and 73 years of age, male genders, stage IV lymphoma (2 cases were DLBCL and other was mantle cell lymphoma). Presented with fever, cough and breathlessness, CT thorax was used for diagnosis which showed diffuse ground glass opacities after 3 cycle of, 1 cycle of R CHOP and 6 cycle of BR regimen respectively and other causes was ruled out. All were treated with high dose steroids, 59 yr old progressed and succumbed to death by 1 month; 29 yr old recovered, further completed treatment with rituximab free regimen. But later developed acute AKI and progressive disease in one month of treatment completion and expired after 40 days ; 73 yr old recovered in 2-3 weeks and on regular follow up.

Conclusion: Rituximab induced lung toxicity is not rare. It is a diagnosis by exclusion. Suspecting early with initial signs and symptoms and use of high dose steroids in early course of disease may reduce the morbidity and mortality.

HEM 021

Acute promyelocytic leukaemia in Human Immunodeficiency Virus infected patient – case report & literature review

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Background: Acute promyelocytic leukaemia (APL) in human immunodeficiency virus (HIV)-infected individuals is very rare. Acute promyelocytic leukaemia (APL), infrequent in HIV-infected people, is a subtype of AML with unique molecular pathogenesis, clinical presentation and treatment. Only eleven cases of APML – HIV have been reported till date.

Case Summary: A 51 year old male, infected with HIV since 2010, on ART since 2014, was admitted with fever and oral thrush. ART was suspended and broad spectrum antibiotics and fluconazole were started. Peripheral smear showed 75-80% abnormal cells, suggesting acute leukaemia. He evolved to dyspnea, hypoxemia, left sided infiltrates, respiratory failure due to pneumonia and was initially managed with oxygen support and Non-invasive ventilation. Flow cytometry confirmed the diagnosis as APL and he was started on ATRA 45mg/m^2. Vancomycin was added after sputum culture grew MRSA. He also developed hypotension requiring inotropic support and endotracheal intubation. Despite all supportive measures, he had persistent fever spikes and developed acute kidney injury & oliguria. Nephrotoxic drugs' doses were modified and haemodialysis was planned. However, he developed sudden bradycardia and cardiac arrest and expired after seven days of admission.

Conclusion: This case highlights the importance of APL's early diagnosis and treatment in patients living with HIV. It is difficult to establish a definite association between HIV and APL due to the scarcity of cases. Thus, more research is needed for improved therapeutic management.

HEM 022

Mesenteric panniculitis as initial presentation of Peripheral T-cell lymphoma – a case report

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Background: Mesenteric Panniculitis (MP) is predominately a disease of the small bowel of unknown etiology, characterized by fibrosis and chronic inflammation of fatty tissue of the mesentery. It is commonly diagnosed based on Contrast enhanced computed tomography (CT scan) and biopsies in equivocal cases.

Peripheral T cell lymphoma (PTCL) is a relatively rare, aggressive, heterogeneous neoplasm involving T lymphocytes categorized under non-Hodgkin lymphoma (NHL). It is associated with a poor prognosis, with a 5-year survival rate of approximately 30% to 40%.

Case Summary: 67-year-old male, presented with abdominal pain and low grade fever of 4 weeks duration. Contrast enhanced CT scan of abdomen demonstrated mesenteric panniculitis and he was started on steroid therapy. Subsequently, he developed generalized weakness/ fatigue with loss of appetite and weight loss of about 12 kg over 1 month duration along with low grade fever spikes. The patient also underwent PET scan due to discovery of palpable axillary lymph node on examination. The scan was suggestive of generalized lymphadenopathy favouring advanced stage lymphoma. He was diagnosed as a case PTCL-NOS with IPI score- 4, on basis of lymph node biopsy and immunohistochemistry. Currently, he is on CHP-BV (cyclophosphamide, doxorubicin ,prednisone - brentuximab vedotin) chemoimmunotherapy regimen.

Conclusion: Identification of MP by imaging should alert the clinician for possible underlaying aggressive non-Hodgkin lymphoma- namely CD 30 positive T cell lymphoma. Newer therapeutic option of chemoimmunotherapy with CHP-BV regimen achieve better progression-free survival and overall survival.

HEM 023

Primary lacrimal gland follicular lymphoma: A case report

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Background: Lymphoma of the orbital adnexa accounts for approximately 1-2% of non-Hodgkin lymphoma (NHL). Primary lacrimal gland lymphoma, especially bilateral, is rare and tends to affect older patients with a female preponderance. NHL histopathological subtype - follicular lymphoma (FL) accounts for 8 % amongst the lymphoma of the orbital adnexa. It is clinically indolent and prognosis is relatively good.

Case summary:An elderly women who presented with swelling in right eyelid, associated with enophthalmos and without pain or visual disturbances. CT scan of head revealed bilateral lacrimal fossa masses with regular contours and mild enhancement suggestive of sarcoidosis / pseudo tumorous involvement of lacrimal gland. PET scan showed lymphoma which was later confirmed by histopathological biopsy and IHC staining. It was diagnosed as low-grade Follicular lymphoma stage II and FLIPI score 2 - intermediate risk category and patient is currently on chemoimmunotherapy.

Conclusion: Lacrimal gland lymphoma is a B-cell non-Hodgkin lymphoma with most common being MALT lymphoma and less frequently, follicular lymphoma histology subtype. PET CT scan can be useful for guiding clinicians in the diagnosis. Imaging can be combined with clinical history, clinical signs and symptoms and histopathology, to improve the differentiation between lacrimal gland lymphoma and other lesions, which can determine the optimal treatment strategy, prognosis, and follow-up.

HEM 024

Castleman Disease- "A Diagnostic and Therapeutic Quandry"

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Background : Castleman disease (CD) is a rare, nonclonal lymphoproliferative disorder having distinct subtypes based on its etiological, pathological, and clinical features. It can affect lymph nodes of any region, and can have varied presentations, imitating both benign and malignant malformations. POEMS syndrome is infrequently associated with CD.

Objectives: To highlight the clinical presentation, pathological features, immunohistochemistry and treatment outcomes of a series of three cases of CD, we encountered from January 2017 to April 2024.

Methods : Type of study – case series; Place of study – VIMS & RC

Clinical details, radiological findings, pathological features, immunohistochemistry results and treatment details were noted for the three CD cases, who presented to our medical oncology opd from January 2017 to April 2024.

Results : The mean age of presentation was 27 (13 - 42) years. All three patients were Males. One patient belonged to pediatric age group where as other two were adults. Neck swelling was the most common complaint. Systemic symptoms were more common in multicentric CD. Of the two patients with multicentric CD, one was diagnosed with POEMS syndrome. Complete surgical excision was offered for unicentric CD. Both the muclticentric CD patients were treated with chemotherapy.

Conclusion: Castleman disease is a rare disease having outcomes ranging from a benign to potentially fatal course. Therefore, it is essential to properly diagnose the exact type of CD and distinguish it from other diseases by clinical history and laboratory diagnostic measures with additional imaging techniques for prompt treatment and management procedures.

HEM 025

Rosai Dorfman Disease of CNS : A Case Report

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Background: Rosai Dorfman disease [RDD] is a rare histiocytosis that presents with painless lymphadenopathy ,cns involvement is rare,seen in only 5% of cases ,the symptoms are non specific and can include headache, seizures, on CT imaging they present as single well circumscribed, extra-axial masses ,definitive diagnosis relies on biopsy ,RDD histiocytes are positive for CD163,CD 68, CD1a and langerin negative which distinguishes it from LCH. This case report describes an unusual presentation of RDD in a 50 year old, male emphasizing the diagnostic challenges and therapeutic approach.

Case Presentation: We present a 50/M patient with fronto ethmoid region mass lesion, similar mass lesion in nasal cavity and left orbit presented with history of seizures and evaluated with neurosurgery, underwent craniotomy with HPE suggestive of low grade NHL-lymphoplasmacytic type and IHC was suggestive of RDD ,with post surgery CT brain showing residual disease and with PET showing only cns involvement , started on steroids , after 6 months of steroids ,MRI brain showed Residual mass ,patient was started on next line of therapy with oral methotrexate.

Conclusion: Due to rarity of CNS involvement by RDD , therapeutic approaches vary, and depend upon mutation analysis study, In RDD, symptomatic patients , surgical resection is preferred followed by imaging of the involved sites with PET, in unresectable cases RT and systemic therapy is preferred.

HEM 026

Navigating Thrombosis in Acute Promyelocytic Leukemia: Insights into use of LMWH

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Background: Thrombotic events in acute promyelocytic leukemia (APL) are less common, but are still a major contributor to morbidity and mortality. Currently there are no guidelines for management of thrombosis. A 2019 ELN panel recommended the consideration of heparin with dose modifications based upon degree of thrombocytopenia.

Objectives: To report a series of APL patients with thrombotic events and emphasise on use of Low molecular weight heparin (LMWH) with adequate transfusions support.

Methods: In this descriptive study, we included eight patients with thrombosis out of 90 patients diagnosed with APL from January 2016 to December 2023 from a quaternary care hospital. Patients were treated as per risk stratification with ATRA/ ATO ± Daunorubicin. All patients received blood products transfusions to maintain a target platelet count of 1,00,000/mm^3 and fibrinogen of 150mg/dL. Dose modified LMWH was initiated at once daily dose and switched to newer oral anticoagulants at the end of induction therapy.

Results: All patients completed treatment as per the protocol. One patient had cardio embolic stroke secondary to Atrial fibrillation, PTE and DVT, three patients had ischemic stroke, one had cerebral venous sinus thrombosis, another patient had peripheral arterial thrombosis, one had catheter induced DVT and one had splenic infarct. None of the patients had hemorrhagic complications. All patients achieved remission at the end of induction therapy and remained disease free at the last follow-up.

Conclusion: This study sheds light on use of modified dose LMWH in APL patients with thrombotic events without any additional adverse events.

HEM 027

Post Transplant Lymphoproliferative Disorder Masquerading as Breast Lump

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Objective: Post transplant lymphoproliferative disorder is a serious complication after solid organ transplantation, ,uncontrolled B cell proliferation due to the blunted immunological surveillance, being the pathogenesis.. This is an interesting case of a post transplant lymphoproliferative disorder with a rare extranodal presentation, which posed challenges in management due to the aggressive course.

Materials and Methods: 35 years female was referred from a peripheral hospital following a modified radical mastectomy, done in suspicious of a malignant breast lump. She was a case of IgA NEPHROPATHY with end stage renal disease for which she underwent a renal transplant, 8 years back. She was on maintenance triple immunosuppressants .She had an ECOG PS 1. Examination revealed a left chest wall swelling measuring 15CM*10CM extending to the axilla. Histomorphology and immunophenotyping , revealed a High grade B cell NonHodgkin's lymphoma. PET CT whole body scan showed increased FDG uptake in bilateral tonsils and the left sided chest wall soft tissue lesion.

Result: A diagnosis of NHL – B cell type, High Grade, stageIIE, IPI and CNS IPI score – 1(increased LDH) late PTLD was made. The paiient was started on RCHOP along with reduction of immunosuppression. As the patient clinically progressed with 2 cycles of RCHOP, she was started on R DA EPOCH with GCSF support. The patient responded well clinically in the form of reduction in swelling size. Patient is on continuous surveillance by the nephrologist. CNS prophylaxis is planned at the end of treatment.

Conclusion:PTLD occurs in 1-3% of kidney transplant patients. Primary breast lymphomas constitute about 2.2% of the extranodal lymphomas and less than 0.5% of the breast malignancies. There were 3 PTLD cases with extranodal involvement of breast reported in literature. Therapy is tailored and individualised. This case is presented to emphasize its rarity, aggressive course and the challenges in the management.

HEM 028

Adult Langerhans cell Histiocytosis: A Case Series.

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Background: Langerhans Cell Histiocytosis (LCH) is a disease characterized by the clonal proliferation of Langerhans cells. It is rare in adults and most of what we know about its diagnosis and treatment comes from paediatric studies. There is paucity of data on Adult LCH patients treated in India. We present a case series of 6 patients of Adult Langerhans cell histiocytosis.

Objective: To study the clinicopathological characteristics, treatment given, responses and survival in adult Langerhans cell histiocytosis patients.

Methods: Six patients of adult LCH treated at our institute were studied. Relevant data was obtained from the case records.

Results: Mean age was 38 years (20 – 54 years). 4 were females. 4 patients presented with lymphadenopathy. 2 with bony lesions. Histopathology was suggestive of histiocytic disorder with IHC for CD1a, S100 were positive in all 6 cases. 1 was BRAF positive. 3 cases were single system LCH and 3 cases were multisystem LCH. 2 patients were treated with Vinblastine and prednisolone. 3 patients in first line and 1 relapsed patient received cytarabine. 5 patients are on follow up with the longest follow up of 11 years. 1 patient died due to CNS involvement – Diabetes insipidus, 9 years after diagnosis.

Conclusion: Accurate diagnosis, choosing the appropriate treatment, and follow-ups are mandatory to provide successful patient management. Both Vinblastine-prednisolone and Cytarabine are well tolerated regimens with good responses. Along with appropriate supportive measures, like management of Diabetes insipidus, these drugs result in good outcomes in Adult LCH patients.

HEM 029

The Hidden Challenge: Decoding Hepatosplenic T-Cell Lymphoma

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Introduction: Hepatosplenic T-cell lymphoma (HSTCL) is a rare and aggressive subtype of T-cell lymphoma. With just over 200 cases documented in the literature, HSTCL represents less than 5% of all Peripheral T Cell Lymphoma cases.

Case Report: 33 year male with no comorbidities , presented with fever since 3 months, and history of severe epistaxis , massive splenomegaly and pancytopenia. Bone marrow biopsy showed erythroid hyperplasia with increase in the immature precursor forms. Abnormal localization of immature precursors (ALIP) noted with presence of immature forms in the central parts of marrow. The possibility of myelodysplastic syndrome was being considered. However, final diagnosis was established with the help of immunophenotyping and karyotyping. Establishing the diagnosis was a tumultuous process. The clinical course of the patient was aggressive, requiring several transfusions of blood products and chemotherapy. In the clinical situation of pancytopenia with hepatosplenomegaly, this case emphasizes the

significance of considering hepatosplenic T cell lymphoma as a differential diagnosis to enable prompt detection of these conditions.

Conclusion: HSTCL is a unique entity where Relapses occur frequently, response to first treatments is subpar, and median overall survival is short .Hence it should be enlisted as an important differential in young patients presenting with pancytopenia with hepato splenomegaly without lymphadenopathy for early initiation of treatment.

HEM 030

Lymph Nodes, Liver , Spleen , Testis , Intestines , Erythrocytes? Acute Myeloid Leukemia- The Unusal Vareities

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Introduction: Acute myeloid leukemia (AML) is the most common leukemia among the adult population accounting for about 80% of all cases. But there are are some rare presentations of AML that are usually not thought of while evaluation. Here we present a case series of such rare presentations that we have seen in our tertiary care in the past year.

Objectives: To give an insight into the rarer presentations of AML and hence create a greater index of suspicion for AML when patient presents with atypical findings.

Material & Methods: We here present a case series of rare forms of Acute Myeloid leukemias which posed a great difficulty for us as far as diagnosis and management was concerned.

Results: The cases presented above, are some of the most unusual presentations of Acute Myeloid Leukemia . Case 1 & 2 depicts the organ involvement in the form of Hepatosplenomegaly and also presence of lymphadenopathy with involvement of skin (in patient 1) . Case 3 depicts Testicular , Jejunal and Lymphnodal involvement of Myeloblasts which later progressed to AML. Case 4 illustrates the presence of immature erythroblasts in the marrow satisfying the criteria of Acute Erythroblastic leukemia ,a Lethal form of AML.

Conclusions: The importance of presenting a case series of different presentations of AML are (i) Organ , skin , lymph nodal involvement can occur in patients of AML and must be carefully evaluated retrospectively or prospectively while suspecting a diagnosis of AML. (ii) Myeloid sarcoma must be considered during the evaluation of testicular mass as it is a very aggressive disease and must be treated on a urgent basis. (iii) Acute Erythroblastic leukemia is a rare entity , with similar treatment protocols but high mortality rates compared to the other variants.

PSYCHO ONCOLOGY AND SUPPORTIVE CARE

PSY 001

Health literacy among patients with cancer undergoing surgery at a tertiary health care centre in South India - A pilot study

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Background: Health literacy encompasses the patient's ability to understand and apply health information in treatment-related decision-making.

Objectives: Development and validation of a questionnaire to assess Health literacy and asses the same in patients diagnosed with cancer and undergoing surgery

Methods: This observational study conducted between August 2022 to October 2022 assessed the level of health literacy among patients who were 1)aged > 18 years, 2)presenting for surgical treatment, and 3)admitted for >1 night. Socio-demographic and clinical factors were examined as covariates. The Brief health literacy screening was used to measure functional health literacy. We attempted to identify correlations between health literacy status and clinical outcomes. A new questionnaire was developed by the investigators, validated by team of experts and implemented on patients for assessing their knowledge about their disease condition and treatment planned.

Results: The mean BRIEF health literacy score for the study population(N=50) was 7.38. Forty-five(90.0%) showed inadequate health literacy. Mean age of the population was 50.96+12.017. Most participants(42.0%) were diagnosed with head and neck cancers and were in the advanced stage(70.5%). Age(p value=0.005) was shown to have a significant association with level of health literacy. Also, education level was an important factor in determining health literacy.

Conclusion: The level of health literacy in this population is much lower, 90.0% of the participants at inadequate level. Age and education were important factors in determining health literacy levels. Screening for low health literacy might help to mitigate its impact on post-operative outcomes.

PSY 002

"Why do adult patients with cancer abandon treatment?"- A qualitative study to understand of healthcare worker's perspectives

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Background: An estimated 10-70% of cancer patients abandon treatment, leading to poorer outcomes and wastage of resources. Causes of treatment abandonment (TxA) are multiple and often interrelated. We conducted a qualitative study among oncology healthcare workers (HCW) in India to gain perspectives on this complex issue.

Methods: Purposively selected oncology HCWs (N=30) from nationwide high-volume centres were interviewed on their perspectives on TxA. We used the grounded theory approach to thematically analyze the qualitative data.

Results: Thirty HCWs [oncologists (N= 17), nurses (N= 6), psycho-oncologists/counsellors (N=7); experience range 6-30 years] from 13 states of India, providing paid (private/semi-private;) or free service (government) were interviewed. The perceived reasons for TxA were classified as 1) Socio-demographic and cultural, 2) Economic, 3) Patient-specific, 4)Clinical, 5)Psychological, and 6)Health system. Catastrophic health expenditure, direct non-medical costs, and indirect medical costs, poor socio-economic status, lack of specific knowledge about disease and treatment, poor patient-provider communication, accessibility, long waiting time, psychological distress, and treatment toxicity were frequently cited as possible reasons for TxA. Most of them agreed that it is a complex problem.

Conclusion: Thes findings provide important insights into a common but poorly understood challenge when caring for cancer patients. In addition to well-known socio-economic factors, this study identified important themes such as lacunae in communication and psychological issues (e.g., distress) causing treatment abandonment.

PSY 003

Demystifying Compassion Fatigue: A deeper understanding to "Heal" the "Healer"!- A Pilot Study

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Introduction: Compassionate fatigue is an occupational hazard and mandates reflection for the professional wellbeing. Most of the working people who in constant care of patient and families do predispose to fatigue out of compassion which disturbs their work- life balance.

Objectives:1. Incidence of compassion fatigue among health care workers and allied professionals. 2. To facilitate the need of MDT approach in holistic care.

Methodology: The study conducted in Medical Oncology Department at tertiary cancer care institute. The study was undertaken as a pilot study to interpret the compassion fatigue utilizing Professional Quality of Life Scale -5 (ProQOL) questionnaire. This was taken as double binded to hide the names and designation so that the participants can reveal their true self without any inhibitions.

Results : There were 40 participants included in the study. 2 consultants, 6 DrNB students, 2 counsellors, 4 ward secretaries, 1 clinical pharmacist, 5 medical officers and 20 nursing staff. Among them, 27[67.5%] females and 13[32.5%] were males. 98 % has average burnout score and 1% has high score in the age group of 31-40 years. 62.5% displayed average STSS. 30% displayed high compassion satisfaction.

Conclusion: Self-care is an integral component of Palliative care and people wellbeing. Identification of compassion fatigue and introduction of interventions like activities, support groups, music or art therapy will definitely have significant impact in the people lives and Department landscape.

PSY 004

From Distress to De-stress- Screening in cancer patients. - An institutional clinical audit.

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Introduction: Distress is the 6th vital sign and most commonly encountered unexplored symptom among cancer patients irrespective of stage grouping, age, gender and economical background. Distress is the constellation of normal feelings ranging from vulnerability to existential misery.

Aims and Objectives: Prevalence of Distress in patients referred to palliative care services and Introduction of MDT interventions as per the Distress thermometer score.

Methodology: Distress was screened using NCCN DT [Distress Thermometer]. The audit done in the institution to screen the patients referred to Palliative care services w.r.t distress. Ideally all the patients should be screened, but for the audit criteria set at 60%. The NCCN DT is a single-item tool using a 0 (no distress) to 10 (extreme distress)–point Likert scale resembling a thermometer. The established cutoff score for further screening is > 4.

Results: Comparison of initial assessment with the standard is 0. Out of 481patients, 178 patients {37%} were screened during the reassessment phase (May 2023- July 2023) but couldn't met the standard percentage (60%) owing to the barriers both patient perspective and healthcare professionals' perspectives. Among 178 patients, 58 patients had DT>/= 4.

Conclusion: Recording and monitoring Distress scores concurrently with the vital signs as a part of daily practice will significantly aid in holistic care and timely interventions through multidisciplinary approach which ultimately enhance quality of life of patients and care givers.

PSY 005

Potential Factors for Treatment Abandonment in Patients with Cancer: a Modified Delphi Consensus.

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Background: Treatment abandonment (TxA) in cancer care is a global challenge with complex, poorly understood factors. A comprehensive patient assessment can uncover potential factors for TxA and inform targeted interventions. Identifying these factors and include in the patient assessment remains a big challenge to healthcare providers.

Objectives: To achieve consensus on potential factors for assessing TxA in patients with cancer using Delphi technique.

Methods: The Delphi technique was conducted with an initial phase of literature review, qualitative interview of healthcare workers and 3 rounds of voting. There were 52 factors identified under six domains: Socio-demographic, Patient/individual, Clinical, Psychological, Economic and Health system. In the round1, panel members were linked to a web-based Delphi questionnaire to select relevant factors. The round 2 included factors retained, using a 5-point Likert scale to achieve consensus. The round 3 sought consensus on factors undecided on previous rounds.

Results: Round 1 received a 100% response from twenty experts, followed by 85.0% (seventeen) in round 2 and 88.2% (fifteen) in round 3. After round 3, consensus was achieved on 40/58 factors. Factors with agreement exceeding 70% were retained in each round, and Agreement statistics was utilized in the analysis.

Conclusion: The consensus findings provide valuable insights into the factors contributing to cancer treatment abandonment. External validation through clinical studies, involving prospective patient assessments, is needed to ensure reliability and validity.

PSY 006

A silent struggle : Burnout among oncologist, a survey at south Indian regional cancer institute.

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Background: Burnout is a significant concern among oncology clinicians globally, with reported prevalence rates ranging from 27% to 75%. However, limited data are available from India, despite its substantial cancer patient burden.

Aims and objectives :To assess the extent of burnout among oncologists

Methods: A survey using the Maslach Burnout Inventory for Healthcare Professionals, comprising 22 questions assessing occupational exhaustion, depersonalization, and personal achievement, was distributed to 120 oncologists.

Results: A total of 96 (80%) responses were recorded and analysed. 80 (83.33%) of respondents experienced moderate (52.08%) to high (31.25%) levels of emotional exhaustion, with radiation oncologists reporting the highest rates. Additionally, 81 (84.37%) reported moderate (39.58%) to high (44.79%) levels of depersonalization and loss of empathy, with radiation oncologists and medical oncologists being the most affected. Furthermore, 75 (78.13%) reported a low level of personal achievement. Burnout was more prevalent among females, residents, and those not engaged in yoga or physical activity.

Conclusion: The study highlights a high prevalence of burnout among oncologists and underscores the need for proactive measures to address this issue and create a healthier work environment.

PSY 007

Burden Caused by Travel among Patients Treated for Common Cancers-: a Mixed Method Study a Tertiary Care Facility in Puducherry, India

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Introduction: Multiple schemes have been introduced by Govt. of India to improve the accessibility and affordability of cancer care in India. However, there are deficiencies in infrastructure and human resources, which impede the delivery of quality cancer care. Despite government support in making individual's seeking treatment, patients have to travel far for healthcare underscores a notable barrier to accessing medical services.

Objectives: This study aims to understand the time taken, expenditure and challenges of the patient undergoing cancer treatment.

Methods: Explanatory mixed method study design was employed and a sample size (n=192) through Systematic random sampling for quantitative and (n=10) sample was enrolled through purposive sampling for qualitative study. Descriptive statistics and thematic analysis were used to derive results.

Results: The majority of patients were aged 65 years and above and 78.6% of them were females. The median travel time for all patients was 4.3 hours (2-7.30). The median travel cost for all patients was 100 INR. There is a significant difference between the patients from rural and urban areas ($p<0.01$). The major travels related challenges were reported at individual, family level and financial burden.

Conclusion: A considerable number of individuals with cancer travel long distances. The study findings suggest that adopting down-referral model for cancer care while strengthening the cancer care services across country. This will improve access and reduce the travel burden.

PSY 008

Media Exposure and Social Support Between Smokeless Tobacco Users and Non-Users Among Auto Drivers

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Background: Despite a regional ban on smokeless tobacco (SLT) in Tamil Nadu, its usage remains prevalent among auto drivers in Chennai. This study investigates the relationship between media exposure, SLT use, and social support

Objectives: To examine how media exposure (ME) and social support (SS) influence SLT use among auto drivers.

Methods: An ex post facto research design was employed, with convenience sampling to get 50 SLT users and 70 non-users. Data was collected using the Harmful Substance Use Screening Tool, Content-Based Media Exposure Scale(C-ME2), and Multidimensional Scale of Perceived Social Support. Appropriate statistical analyses were performed.

Results: No significant correlation was found between ME,ASME and SS among both SLT users and non-users. However, non-users of SLT exhibited significantly higher levels of pro-social media engagement compared to SLT users.

Conclusion: The study highlights that pro-social media exposure is higher among non-users of SLT, while ASME and SS do not significantly differ between SLT users and non-users. The findings suggest that factors other than ME and SS may influence SLT use among auto drivers. Despite the ban, SLT use persists, indicating a need for targeted interventions addressing the underlying causes. Persistent SLT use among auto drivers suggests the need for interventions targeting root causes of SLT consumption.

PSY 009

Quality of life amongst Adolescent and Young Adult patients with cancer:

A pilot study from a tertiary care centre

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Introduction: Adolescents and young adults (AYAs) with cancer face unique psychological challenges in seeking and understanding cancer-related information, accepting the diagnosis, coping with treatment-related side effects and stress, maintaining an active and independent life, and maintaining a positive attitude and adherence to treatment which reflects overall quality of life.

Objectives:1. To study the psychosocial morbidity in adolescents and young adults. 2. To assess the quality of life of AYA.

Methodology: This was a pilot observational study in Meenakshi Mission Hospital and Research Centre, Dept of Medical Oncology. All patients aged 15-39 years, newly diagnosed with cancer, and their clinical presentation, and pathological and psychosocial profile of the patients will be taken and observed. 50 patients were selected based on the eligibility criteria and statistical analysis was done by using SPSS Version 26. NCCN Distress thermometer and a quality-of-life assessment by WHOQOL-BREF did a psychological evaluation.

Results: Out of 50 patients,22 were male (44%) 28 were female (56%). 62% scored >/=4 in DT, Quality of life measurements were done utilizing WHOQOL- BREF. It is divided into four domains among them physical and environmental domain is highly affected.

Conclusion: Most of the AYAs experienced psychosocial morbidity which reflected decline in QOL and routine screening should be mandated concurrently with directed therapy for multiple disciplinary team interventions based on the profile.

PSY 010

Empowering Caregivers of Cancer Patients: A Randomized Pilot Study on the Effectiveness of a Psycho-Social Intervention Module

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Background: Caregivers are the invisible patients in the family and go through the treatment process for the patient from the initial period till the end. The diagnosis of cancer brings out a complete psychosocial sequel of distress within the individual and the family.

Objective: To evaluate the Effectiveness of Psychoeducational Intervention Module in supporting familial caregivers of patients with cancer.

Materials and Methods: This mixed-methodology study employed a cross-sectional design, combining qualitative and quantitative approaches. A psychoeducation module was developed through expert interviews and thematic analysis. Standardized tools assessed caregiver burden, perceived social support, general health, and quality of life at baseline and post-intervention. 22 caregivers were randomly assigned to the intervention group, and 23 to the control group. Ethical clearance was obtained from the institutional authorities, Meenakshi Mission Hospital and Research Centre to conduct the study.

Results: We observed significant differences in perceived social support, general health questionnaire scores, burden, and quality of life among familial caregivers of cancer patients, both at baseline and post-assessment, as well as between the interventional and waiting list groups.

Conclusion: Initial findings suggest that familial caregivers exhibit significantly lower levels of perceived social support and quality of life, along with higher levels of mental health issues and burden. Further research is needed with a larger number of familial caregivers of patients with cancer to explore the impact of this psychoeducational intervention module.

PSY 011

Psycho-Social Late Effects of Pediatric Cancer Long-Term Survivors – A Qualitative Study

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Objective: Childhood cancer survivors often face a myriad of challenges as they navigate adulthood, particularly due to the late effects of cancer treatment. These late effects can manifest physically, psychologically, and socially, significantly impacting survivors While previous research has examined medical aspects of late effects, there is a paucity of qualitative studies exploring the psycho-social implications experienced by survivors. Present study explored the psychosocial late effects of the pediatriccancer survivors.

Method: Pediatric Cancer Long Term survivors (n=25) who are between the age group of 18- 55 years and who are regular follow up care at After Completion Therapy Clinic Cancer Institute (WIA) were included inthe study. Semi structured interview schedule was used to collect the data. An in-depth interview technique was conducted to collect the data and thematic analysis was used to analyze the obtained data**.**

Results: Themes emerged were difficult interpersonal relationships, limitation in career, financial constraints and family related concerns. Interpersonal relationships were profoundly affected, with survivors experiencing difficulties in establishing and maintaining relationships. Familial dynamics played a significant role, with poor familial functioning associated with increased psychological distress. Survivors with lower beliefs of health reported heightened psychosocial distress.

Conclusion: The findings emphasize the complex psycho-social impacts experienced by childhood cancer survivors due to late effects of cancer and its treatment. Supporting survivors with the focus of holistic well-being will help in the attainment of better transition after cancer. Implication: Interventions should foster survivors' health belief to address psychosocial distress effectively.

PSY 012

Body Image Distress and Quality of Life of Oral Cancer Patients Before and After Curative Surgical Treatment: A Prospective Study From A Tertiary Cancer Centre

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Introduction: Oral cancer and its treatment can have significant impact on Quality of life (QoL).Body image distress (BID) is a crucial psychosocial issue reported by oral cancer patients.

Objectives: The objectives of the study were to find the BID and QoL before and after surgery and to find the relationship between BID and QoL.

Methodology: The researcher utilized a prospective longitudinal research approach. The sample included 44 oral cavity cancer patients whose primary modality of treatment is surgery. The QoL and BID were assessed using Inventory to Measure and Assess imaGE disturbancE - Head & Neck (IMAGE-HN) and Functional Assessment of Cancer Therapy-Head & Neck (FACT HN). Paired t-test was used to find the significant difference in BID and QoL before and after surgery. Karl Pearson's Correlation coefficient was used to understand the relationship between BID and QoL. One way ANOVA was used to find the significant difference in BID and QoL based on socio demographic factors and clinical factors.

Result: The study found that BID increased and QoL decreased after surgery. The study reported significant correlation between QoL and BID. There was a significant difference in QoL and BID based on oral cavity subsite and in QoL based on comorbidities but not on other sociodemographic factors.

Conclusion: The study concluded that there was a significant decline in the body image and Quality of life of oral cavity patients after their curative intent surgery and the QoL of the patients decreased with increase in BID.

PSY 013

Determinants of Distress among Paediatric Cancer Patients – A Retrospective Study.

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Introduction: In India, nearly 50,000 children are diagnosed with cancer every year and with advancements in treatment there is an improvement in the overall survival. The diagnosis of cancer not only affects the physical health of the child but also causes distress for the patient and the entire family. Recognizing and understanding of distress is crucial, particularly for patients early in their cancer journey. There is dearth of literature on distress among pediatric cancer patients from developing countries so, it is important to screen and provide appropriate psychosocial intervention to alleviate it. Hence, the present study was conducted in a tertiary cancer center in Tamil Nadu aimed to understand the levels of distress among pediatric cancer patients and factors associated it.

Method: Pediatric cancer patients between the age group 7 to 18 years, admitted for cancer treatment from June 2020 to December 2023, were considered for the study. The study included pediatric patients' distress across the entire cancer care, from the early stages of treatment to palliative and supportive care, which can occur at any point in a patient's cancer journey. Distress was screened through face-to-face clinical interviews conducted by psychosocial care provider. The outcome variable of this study was distress, assessed through the Pediatric Distress Thermometer (PDT). Descriptive statistics was used to summarize the data and to find the proportion of patients with distress. Chi-square analysis was carried out to find the association between the outcome variables. Regression analyses was used to understand the determinants of distress among the pediatric cancer patients.

Results: Among 450 pediatric cancer patients, majority was boys (63.1%) and was studying secondary education (67.1%). More than half (75.3%) of the patients were in the age group between 12-18 years. Of all, 66.7 % were aware of their diagnosis and 56.3% were diagnosed with leukemia. Overall, 32.7% of the pediatric patients reported moderate to severe distress. Significant association of distress with knowledge of prognosis, sleep, appetite, pain ($p<0.000$), Age ($p=0.054$) and gender ($p=0.005$) was found. Determinants of distress among pediatric cancer patients are knowledge of prognosis, sleep and appetite.

Conclusion: Pediatric cancer patients experience distress at any point during treatment. The study elucidates several factors significantly associated with distress among pediatric cancer patients and tailored interventions needs to be provided to alleviate distress. It can help in improving the quality of life of cancer during the treatment and into survivorship.

PSY 014

The Efficacy of Laughter Therapy as a Cost-Effective Tool for Managing Stress among Healthcare Professionals in Cancer Care Settings: A Pilot Study

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Background: Healthcare professionals working in cancer care settings often experience high levels of stress due to the emotional demands of their work. Managing stress is crucial for maintaining well-being and providing quality care to patients. Laughter therapy has emerged as a potential cost-effective intervention to support healthcare professionals in coping with stress and promoting overall wellness.

Objective: This pilot study aimed to examine the efficacy of laughter therapy as a cost-effective tool for managing stress among healthcare professionals.

Methods: A sample of 50 healthcare professionals, including Doctors, nurses, and support staff, participated in a laughter therapy intervention. Self-reporting of intervention before and after were collected. Qualitative feedback was also collected in this study.

Results: The results of the study demonstrated a significant reduction in stress levels among healthcare professionals following the laughter therapy intervention. Participants reported feeling more relaxed, energized, and better equipped to cope with the demands of their work. Qualitative feedback highlighted the perceived benefits of laughter therapy in enhancing team dynamics, improving mood and fostering a positive work environment.

Conclusion: Laughter therapy emerged as a cost-effective and beneficial tool for managing stress among healthcare professionals in cancer care settings. Healthcare professionals Practicing laughter therapy can effectively cope with stress, improve their well-being, and enhance the quality of care provided to cancer patients. Further research with larger sample sizes and longitudinal studies is warranted to explore the long-term impact of laughter therapy on stress management in healthcare professionals.

PSY 015

Choosing Home: Analyzing End-of-Life Preferences in Palliative Care at MCCF

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Background: Providing high-quality end-of-life care is essential for patients with advanced cancer. The Madras Cancer Care Foundation (MCCF) operates from Apollo Cancer Centre, Cancare Foundation at Voluntary Health Services (VHS), and Kumaran Hospitals (KH). This study assessed end-of-life care outcomes in patients with advanced cancer managed by MCCF.

Objectives: To evaluate end-of-life care outcomes focusing on the timing of palliative care introduction, treatment de-escalation, location of death, and psychosocial support for patients and caregivers.

Methods: Data from 351 deceased patients receiving palliative/end-of-life care at MCCF's VHS center, Apollo Cancer Centre, and KH from January to December 2023 were analyzed. Patient demographics, metastatic patterns, end-of-life care, and length of stay were examined.

Results: Demographics: Median age at death was 69 years for males and 64 years for females. Common metastatic sites included the lung, brain, bone, and liver. **Location of Death:** 197 patients (56.1%) passed away at home. Across all three centers, 135 patients (38.5%) died during supportive care. Five patients (1.4%) died in the ICU. Sixteen patients (4.6%) died at other hospitals.**ICU Deaths:** Five patients died in the ICU despite being treated under palliative care. Reasons included family insistence on further treatment despite multiple counselling.**Palliative Care Introduction:** Introduced 6 months to 1 year before expected death, individualized based on prognosis, stage, and treatment response, and transitioned to home care as conditions worsened.**Length of Stay and Supportive Care Admissions:** Median length of stay: 1-39 days. **DNAR Orders:** DNAR orders were obtained from 135 (38.5%) patients.**Causes of Death:** Common causes included disease progression, metastasis, sepsis, and multi-organ failure.**Psychosocial Support:** MCCF facilitated home visits for patients unable to travel, providing comprehensive psychosocial support, including monthly bereavement meetings. Financial support for low-income groups was extended through cancare trust.

Conclusions: Early palliative care introduction leads to a significant proportion of home deaths, effective symptom management, and holistic care, highlighting the importance of comprehensive end-of-life care. The preference for home deaths suggests that patients and caregivers value the comfort, familiarity, and emotional support of home. Home deaths may provide dignity and peace, enhancing the experience for patients and families. Further research and initiatives are needed to improve end-of-life care for those with advanced cancer.

PSY 016

A Descriptive Study of Nutritional Assessment for Patients with Resectable Gastric Cancer on chemotherapy and surgery

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Background: Nutritional assessment is crucial for gastric cancer patients. Monitoring nutritional intake and addressing deficiencies improve patients overall well –being, tolerance to treatments, and enhance their quality of life during and after cancer therapy.

Aim: To study the nutritional status of the patients on surgery and chemotherapy in resectable gastric cancer.

Methods: This is a descriptive analysis of prospectively maintained data from single centre as part of the Naga Study (Neoadjuvant versus Adjuvant chemotherapy in resectable gastric cancer- A randomized phase 3 multicentre clinical trial). Details on the dietary habits and nutritional assessments were collected at baseline and during follow up by using subjective global assessment tool (SGA). Patients found to have macronutrient deficits were given counseling and dietary advice during chemotherapy and surgery.

The statistical comparison between energy and protein deficits at baseline and follow-up was done by using paired t-test.

Results: A total of 35 resectable gastric cancers were enrolled from 22.9.22 to 15.02.24.The median age of the study group was 55 (36 – 68) years. Baseline characteristics and initial nutritional assessment details are given in Table 1. In terms of Macronutrient deficiency at initial evaluation all patients had energy and protein deficit respectively.

For entire cohort with available follow-up, mean energy deficit changed from 47.4 ± 20.5% at baseline to 28.0 ± 9.64% follow-up (p-0.001) and protein deficit improved from 62.4 ± 15.7 % to 35.7 ± 10.2 % at follow-up (p-0.001).

Conclusion: A significant proportion of patients had macronutrient deficiency; adequate nutritional intervention will help improve treatment outcomes and quality of life.

PSY 017

Charting Post-operative Trajectories in Cancer patients: Perspectives from a resource constrained setting in Northeast India

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Background: Perioperative monitoring in critical care facility is a major determinant of post-operative outcome. However, critical care resources are finite and expensive, thus identifying those most likely to benefit is of great importance in resource constrained setting. Hence this study aims to identify prognostic factors predicting post-operative mortality and morbidity for patients in surgical units may help in identifying high-risk patients and developing an approach to reduce mortality and tailor admission to critical care in a resource-constrained setting.

Methods: This was a cohort study involving secondary data of all patients with cancer aged above 18 years admitted into the critical care. Pre-operative, intra operative and post-operative parameters were extracted in excel format from the cloud physician electronic database. Descriptive analysis and log-binomial regression was used to analyse the date using STATA version 12. 1. Patients with post-operative morbidity and mortality was considered as poor post-operative outcome.

Results: Our study included 421 patients with the mean age of 58.02 years (SD, 12.85). The majority of the patients were in the age range of 41 to 60 years(53%), 29% were above 60 years of age and 88% were found to use tobacco. Of all patients, 287(68%) had significant postoperative morbidity and 13 patients (3%) died. Acute Physiology and Chronic Health Evaluation(APACHE-II) score >15 (adjusted RR 4.5, 95% CI (1.48-14.01), surgeon's experience (adjusted RR 1.7, 95% CI (1.06-2.94) and blood loss(adjusted RR 2.42 ,95% CI (1.43-4.10) were found to be significant predictors of poor post-operative outcome.

Conclusion: Higher APACHE-II score, significant blood loss and operated by less experienced surgeon were the major determinants of poor post-operative outcomes and necessitates post-operative monitoring in critical care facility.

PSY 018

Cancer Aging Research Group (CARG) Risk Score a simple and effective tool to predict chemotherapy related toxicity in elderly cancer patients receiving intravenous chemotherapy.

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Introduction: Geriatric assessment (GA) of cancer patients undergoing chemotherapy is important in preventing toxicity related death. Clinical judgment tools like Karnofsky performance (KPS) are simple and rapid, however subject to inter-observer variability. This study compares a validated tool - The Cancer and Aging Research Group (CARG) score with KPS assessment.

Material and Methods : This prospective observational cohort study was conducted in the Department of Medical Oncology, Meenakshi Mission Hospital and Research Centre, Madurai, Tamil Nadu. The study included all newly diagnosed patients over the age of 65 years with solid malignancies undergoing intravenous chemotherapy and the risk of grade3/4 toxicity was assessed using CARG score and KPS tools.

Results: Out of 102 patients analysed ; 39.2% had Low risk (0–5 points), 36.3% had intermediate risk (6–9 points) and 24.5% had high risk (10–19 points) CARG score. The risk of grade 3 / 4 chemo related toxicity correlated with increasing CARG score (12.5% low risk, 27% medium risk and 56% high risk; p =0.001); however there was no association between KPS and severe Toxicity.

Conclusion: CARG score is a simple and better tool than KPS , in predicting high grade chemotherapy related adverse events in elderly Indian cancer patients undergoing intravenous chemotherapy for solid tumours.

PSY 019

Study of Community home based care enhances treatment compliance and better quality of life for over 5yrs by 80% in Nellai cancer care center Tirunelveli

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Background: Cancer care is vital, Nellai cancer care centre is offering community home-based palliative care which has emerged as a promising approach to improving the quality of life and treatment outcomes for cancer patients.

Objectives- This longitudinal study aimed to investigate the impact of community home-based care on the quality of life and treatment compliance of cancer patients over a five-year period at the Nellai Cancer Care Center in Tirunelveli, with a focus on observing an improvement in treatment compliance rates.

Methods: A cohort of cancer patients receiving community home-based care at the Nellai Cancer Care Center was analysed over five years 2019-2024. Patient treatment compliance measures, and patient-reported outcomes were collected at regular intervals.

Results: The study findings demonstrated a significant improvement in the quality of life and treatment compliance of cancer patients receiving community home-based care at the Nellai Cancer Care Center over the five-year study period. Patients reported higher levels of comfort, emotional well-being, and treatment adherence, leading to an 80% improvement in treatment compliance rates.

Conclusion: Community home-based palliative care plays a vital role in enhancing the quality of life and treatment compliance of cancer patients. By providing holistic care in a familiar setting, home-based interventions can lead to substantial improvements in patient outcomes, treatment adherence, and overall quality of care in the communities.

PSY 020

Experience of using hybrid ICU in a resource constrained cancer hospital in northeast India

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Background: Cachar Cancer Hospital and Research Centre, a tertiary hospital in resource constrained setting, northeast India, introduced hybrid intensive care unit [ICU, centralized monitoring model] to compensate for non-availability of intensive care specialist. We report our early implementation experience (October 2021-December 2022) in the form of patient management and outcome indicators.

Methods: This was a cohort study involving secondary data.

Results: There were 909 admissions with curative intent, of which 73% were post-surgical. During October 2021-March 2022, there were 238 admissions which increased to 448 during April-December 2022 (period when effective implementation happened). The changes in management and outcome indicators were, ventilator use, 8% to 12% (p=0.128); death rate during admission, 7% to 6% (p=0.575); readmission rate within three months, 21% to 25% (p=0.309), and median admission duration, 1 to 2 days (p=0.035).

Conclusion: The admissions increased over time. Introduction of hybrid ICU did not adversely impact management and outcome indicators.

PSY 021

Re- Thinking data strategy and leading the way through Data Quality & Integrity

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Re-Thinking data strategy and leading the way through Data Quality & Integrity

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Introduction

- In today's data-driven world, organizations face a multitude of challenges in harnessing the power of their data.
- From collection to analysis, ensuring data quality and integrity is paramount for making informed decisions and gaining a competitive edge.
- This e-poster explores the critical role of data strategy in maintaining data quality and integrity, providing insights into effective approaches for navigating the complex data landscape.

Understanding the Data Landscape

- The data landscape is vast and diverse, encompassing various types of data sources, formats, and structures.
- From structured databases to unstructured text data and everything in between, organizations must grapple with the complexities of managing diverse data sets.
- Additionally, the proliferation of data from sources such as IoT devices, social media, and sensors adds another layer of complexity to the data landscape.
- It's evident that data quality and integrity are closely related, but understanding the subtle difference is essential to maximize the data's value as explained in table-1.

TABLE-1

Feature	Data Quality	Data Integrity
Focus	Inherent characteristics of the data itself	Maintaining the trustworthiness of data throughout its lifecycle
Objective	Ensures data is fit for its intended purpose	Ensures data remains accurate, reliable, and unaltered
Key Attributes	Accuracy, Completeness, Consistency, Validity, Timeliness	Security, Lineage, Auditability
Impact	Affects data analysis, decision-making, and operational efficiency	Affects, compliance, and risk management
Mechanism	Data cleansing tools, data validation rules, data governance framework	Encryption, access controls, audit trails, data backup and recovery

Challenges of data quality & integrity:

- Despite the advancements in data technologies, ensuring data quality and integrity remains a significant challenge for many organizations.
- Common issues such as missing or inaccurate data, inconsistent data formats, and data silos can undermine the reliability and trustworthiness of data-driven insights.
- Moreover, data privacy and security concerns further complicate efforts to maintain data integrity.

Key Components of an Effective Data Strategy

- A robust data strategy serves as a guiding framework for addressing the challenges of data quality and integrity.
- By aligning business objectives with data initiatives , organizations can establish clear goals and priorities for data management.
- A comprehensive data strategy encompasses aspects as follows-

1. DATA GOVERNANCE :

- Establishing policies , processes , and controls to ensure the consistent and reliable management of data assets.
- This includes defining roles and responsibilities , implementing data standards and enforcing compliance with regulations such as GDPR and CCPA.

2. DATA ARCHITECTURE:

- Designing a scalable and flexible data architecture that supports the integration ,storage and processing of diverse data sets.
- This may involve leveraging technologies such as data lakes , data warehouses and cloud-based solutions.

3. DATA QUALITY MANAGEMENT:

- Implementing measures to assess , monitor and improve the quality of data throughout its lifecycle.
- This includes data profiling , cleansing , deduplications and validations to ensure accuracy and consistency.

4. DATA SECURITY :

- Implementing robust security measures to protect data assets from unauthorized access ,breaches and cyber threats.
- This involves encryption, access controls, authentification mechanisms and regular security audits.

Leading the Way

- As data stewards and custodians, organizations must take proactive steps to lead the way in promoting data quality and integrity.
- This requires a collective effort involving stakeholders across the organization, including business leaders, data scientists, IT professionals, and compliance experts.
- By prioritizing data quality and integrity, organizations can unlock the full potential of their data assets and drive innovation, growth, and competitive advantage in the digital age.
- Finally Leading the Way through the artificial intelligence(AI)[1] is of latest technological advancement.
- Figure- 2 and 3 depicts AI technologies and proposed solution for data privacy and security respectively.

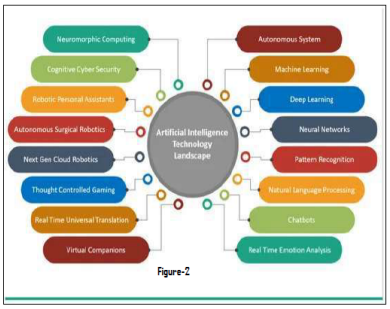

Figure-2

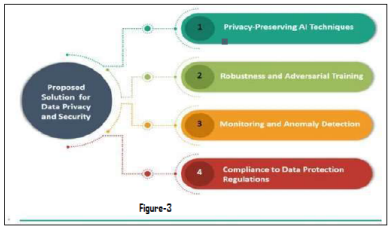

Figure-3

Conclusion

In conclusion, navigating the data landscape requires a strategic approach to data quality and integrity.

By developing a comprehensive data strategy and embracing best practices in data governance, architecture, quality management, and security, organizations can overcome the challenges of the data landscape and harness the power of data-driven insights to achieve their business objectives.

References

1. Aldoseri, A.; Al-Khalifa, K.N.; Hamouda, A.M. Re-Thinking Data Strategy and Integration for Artificial Intelligence: Concepts, Opportunities, and Challenges. *Appl. Sci.*2023,*13*,7082. https://doi.org/10.3390/app13127082 .

PSY 022

Clinical AI companion- Real World Clinical Data Sharing to Enhance the Quality, Personalization of Patient Care at significantly lower cost

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Abstract: The geographically dispersed nature of patients, imbalance between demand and availability of care providers, pervasiveness of manual processes, and fragmented healthcare ecosystem (lacking the benefits of Artificial Intelligence, data harmonization and data sharing) present a tremendous opportunity for advancements.

This abstract focuses on positive impacts of decentralized and distributed secure communications, clinical data sharing, and AI powered real time intelligence.

Clinical Data Sharing can be encouraged and practically advanced by combining the powers of these five solution components:

1. Non-blockable, geographically dispersed and always available secure communications to enhance Telehealth and Provider Patient Engagement.
2. Connected and intelligent AI powered mobile endpoints (phones, tablets, wearables, IoT devices, and more) with ambient condition detection and communication capability for Remote Patient Monitoring.
3. An efficient AI function enabling automated written transcription and translation of conversations enabling Clinician Workflow Automation with efficient documentation and bringing focus back on the patient.
4. A flexible platform with rich APIs and data layer to integrate with Electronic Medical (Health) Records with distributed blockchain to increase Clinical Data Sharing and Collaboration.
5. A mobile application that separates professional and personal communication and enables omni-channel communication to bring Work/Personal Life compartmentalization and privacy for practitioners.

And delivering all of the above in an ethical, auditable, scalable and compliant manner.

The power of secure, reliable, accessible, and remotely available real time communication and clinical data sharing can:

1) Enhance the patient's care experience
2) Improve the provider's care delivery efficiency
3) Enhance the cost effectiveness of care

SCREENING AND PREVENTIVE ONCOLOGY

SCR 001

Correlation of Swede Scores with Histopathological Findings in VIA-Positive Cervical Cancer Screening: A Study from Nellai Cancer Care Centre

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Background: Cervical cancer ranks as the fourth most common cancer among women worldwide and the second most common in India. Screen-positive patients undergo colposcopy, where abnormal lesions are scored using the Swede scoring system and biopsied. The total score ranges between 0 to 10.A score of > 5 is reported to identify all high grade squamous intraepithelial lesions.(HSIL)

Objective: This study aims to correlate Swede scores with histopathological findings.

Materials and Methods: This Prospective study was conducted at Nellai Cancer Care Centre, including 80 VIA-positive patients referred from camps between October 2022 and March 2024. VIA positive patients meeting the inclusion criteria underwent colposcopy and directed biopsies. Swede scores were then correlated with histopathological results.

Results: Among the 80 study participants, 10 had a Swede score of >5, with 6 showing benign lesions and 3 exhibiting premalignant stages as per histopathology. Of the 70 participants with Swede scores between 0-5, 48 had benign lesions, and 4 were premalignant. A significant correlation ($p = 0.05$) was found between Swede scores and histopathology. Using a Swede score cut-off of 0-5 for low-grade lesions and >5 for high-grade lesions, the test group exhibited a sensitivity of 43% and a specificity of 89%. The Positive Predictive Value (PPV) was 33%, and the Negative Predictive Value (NPV) was 92%.

Conclusion : According to this study,the swede score is more reliable in ruling out premalignant cases as noted by the high specificity(89%) and high negative predictive value(92%) but less reliable in confirming them.

SCR 002

"Awareness and attitude towards cervical cancer and human papilloma virus (HPV) vaccine among MBBS students of medical college in Kolar, India"

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Background: Cervical cancer remains a significant public health concern globally, with human papillomavirus (HPV) vaccination representing a critical preventive measure. Medical students, as future healthcare providers, play a crucial role in promoting vaccination and cervical cancer awareness.

Aims and Objectives: To assess awareness and attitudes towards cervical cancer and HPV vaccine.

Methods: A cross-sectional survey was conducted among MBBS students across different years of study at a medical college in Kolar, India. The survey included questions related to awareness of cervical cancer, HPV, and the vaccine, vaccination status, willingness to receive the vaccine, and reasons for non-willingness. Data were analyzed using appropriate statistical methods.

Results: 419 MBBS students participated. 201 (48%) students were in the final year (test group). 218 (52%) had recently joined medical school. First and second year MBBS students considered as control group. Third and 4^{th} year MBBS students are considered as test group. The study found a significant increase in awareness levels among test group. Senior students were more likely to have received the HPV vaccine and expressed greater willingness to get vaccinated. However, barriers such as fear of side effects and lack of information persisted, particularly among first-year students.

Conclusion: Medical education significantly influences awareness and attitudes towards cervical cancer prevention. By enhancing education and promoting vaccine acceptance, medical schools can contribute to the global effort to eliminate cervical cancer as a public health threat.

SCR 003

Deciphering the Factors Behind the Recent Increase in Cancer Incidence due to river pollution in Tamil Nadu: A Rigorous Scientific Impact Assessment

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Background: Even in individuals without inherited causes or behaviors, environmental pollution may be a contributing factor in the rise in cancer occurrences. Toxic effluents from various industries, agricultural sectors and domestic wastes products released directly into the river system acts as promoters of carcinogenesis.

Aim: The aim is to study the quantified levels of carcinogens across major river basins like Cauvery, Bhavani, Noyyal, Thamirabharani, Palar-Thenpennai, Vaigai and Amaravti in Tamil Nadu, India such as Arsenic, Cadmium, Chromium, Nickel, Lead, Nitrite/Nitrate, Phosphates based on previous literatures and findings its association with spurts of cancer cases.

Materials and Method: Carcinogens were identified based on "International Agency for Research on Cancer" lists of carcinogens with cancer site. TNCRP 2021 was taken as reference to analyze the percentage of cancer cases reported in all 38 districts.

Results: The study shows that excessive presence of carcinogens has huge impact on the rise in cancer cases. The study shows significant association between exceeding of the permissible limit of various toxic heavy metals and percentage of cancer cases in that particular district.

Conclusion: Oral findings commonly associated with chronic toxicity of carcinogenic heavy metals are listed which serves as an alarming signal to adapt to healthy lifestyle and dietary modifications as required. This study provides evidence based real-time condition to understand the situation better formulate strategies in order to overcome the current scenario make things straight and save innocent lives.

SCR 004

The Toxic Harvest: Uncovering Carcinogenic Pesticide Residues In Tamilnadu

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Abstract: Chemical pesticides have become an integral part of modern agriculture. This study analyses the levels of carcinogenic pesticide residues and their maximum residual limit (MRL) in fruits and vegetables consumed daily in Tamilnadu, India. A total of 24 samples of commonly used fruits and vegetables which are consumed by the general population of Tamilnadu were collected from the major markets of Tamilnadu for analysis of pesticide residues. The sampling technique followed was the multistage cluster random sampling technique. Pesticides were extracted by the Modified QuEChERS method, and the residue pesticides were analysed using gas chromatography-mass spectrometry (GC-MS). The carcinogenic link of the reported pesticides is as follows: Y-HCH has a direct link to non-Hodgkin's lymphoma risk. o, p-DDT causes pancreatic cancer, liver cancer, and it is a marker for breast cancer. o,p-DDD is linked to lung, liver and thyroid cancers. Dichlorvos causes prostate cancer. Cypermethrin is related to lung tumours in mice. Phorate has a direct link to prostate cancer. Propargite is related to intestinal tumours. Chlorpyrifos is linked to several cancers like rectal, lung, brain, breast, prostate cancer, and non-Hodgkin's lymphoma. Carbendazim causes hepatic tumours. Thiacloprid is linked to thyroid, uterine, and ovarian tumours. Malathion causes non-Hodgkin's lymphoma and prostate cancer. Tebuconazole is related to liver tumours. Dicofol causes liver adenoma and carcinoma. Monocrotophos increases the growth of breast cancer cells. Dimethoate has a direct link to adrenal, thyroid and pituitary cancers. Diazinon has a direct link to lung cancer and non-Hodgkin's lymphoma. Heptachlor is related to thyroid, pituitary, and reproductive system cancers. The prevalence of widespread contamination of fruits and vegetables consumed in Tamilnadu by carcinogenic organochloride and organophosphate pesticides has been found. To prevent these cancers, strict preventive measures like adhering to laws managing pesticides, consuming organic fruits and vegetables, and using biopesticides should be implemented by the government authorities.

SCR 005

Phytochemicals- A miracle component in Cancer Prevention and Cure

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Abstract: Each year approximately 400 000 children develop cancer. About 30-50% of cancers can currently be prevented by avoiding risk factors and implementing existing evidence-based prevention strategies. Chemoprevention, a relatively new and promising strategy to prevent cancer, is defined as the use of either natural or synthetic substances or their combinations to block, reverse or retard the process of carcinogenesis. Naturally occurring compounds from plants known as phytochemicals, serve as vital resources for novel drugs and also sources for cancer therapy. Phytochemicals, are not regarded as essential nutrients in humans although an increasing number of well-conducted studies are linking higher intake with a lower risk of developing cancer, as well as lower relapse after initial treatment completion. Phytochemicals have shown specific and non-specific anticarcinogenic properties, such as anti-inflammatory and estrogenic activities, reduction of oxidative damage to lipids and DNA, induction of phase I and II enzymes, inhibition of angiogenesis, and stimulation of DNA repair and apoptosis. Their anti-oxidant properties help to protect our DNA from ingested or environmental carcinogens. Not only do they improve our daily lives by helping our food taste, smell and look appetizing, they also reduce our risk of cancer and help people living with and beyond treatments. This review focuses on the role of phytochemicals in cancer prevention.

SCR 006

Low-Hanging Fruit: Seizing the opportunity to leverage home-based Palliative Care for Cancer education and Screening in High-Risk Region

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Background: The Northeast region of India faces a significant cancer burden. Despite national screening efforts, coverage remains low in this area. Seizing every opportunity for early detection is crucial in reducing cancer-related morbidity and mortality. This study assessed the outcomes of cancer education and screening among family members and neighbours of cancer patients on home-based palliative care in Karimganj, Hailakandi, and Cachar districts of Assam, India.

Methods: This is a cohort study based on record review. Trained lay health workers (TLHW) conducted cancer education and screening (self-administered or facilitated questionnaire) during routine home visits, targeting family members and neighbours of cancer patients during the delivery of home-based palliative care.

Results: Of 916 individuals , 75 (8.2%) reported cancer-related symptoms, 33 (44%) attended the tertiary care centre (TCC) for detailed assessment. Of them, 17 (51.5%) were diagnosed with cancer, predominantly oral, breast, and other cancers. The median days from symptom screening to visit to TCC were 10 (IQR 2.5-49.5) days, while from TCC visit to diagnosis was 1 (IQR 0-8) day.

Conclusion: Integrating cancer education and screening into home-based palliative care is feasible and aids in prompt diagnosis in resource-limited settings. This approach could be used as oppurtinity for early cancer detection and management, especially in high-burden regions like Northeast India.

SCR 007

High unknown survival status among patients with oral cavity squamous cell carcinoma from a tertiary hospital in north-eastern India.

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Background: India accounts for ~1.3 million new cancer cases annually. Cachar Cancer Hospital and Research Center (CCHRC) Silchar, a tertiary care hospital provides care to vulnerable cancer patients with limited access to health care facilities from the northeast region. Though studies have been conducted in this region focusing on oral cancers, limited evidence is available on the treatment cascade (especially the losses between registration and treatment completion) and survival status post treatment completion among patients with OSCC.

Objectives: To assess the losses during treatment and survival status at three years post treatment completion among oral squamous cell carcinoma patients registered with a curative intent during January 2008-December 2019.

Methods: This was a cohort study using secondary data. Predictors of non-completion of treatment and unknown survival status at three years were assessed using log binomial regression.

Results: Of 916 registered patients, 76% presented with stage IV disease and 38% (n=344) did not complete treatment. Among 572 completing treatment, survival status at three years was unknown (including lost to follow up) for 41% patients. No factors were significantly associated with non-completion of treatment. The patients residing outside Cachar district (56% of patients) were more likely to have unknown survival status at the end of three years when compared to those within ($p<0.001$).

Conclusion: Large volume of unknown survival status highlights the need for standardized monitoring strategies during cancer care. In consultation with the national non-communicable disease program in the district and the region, linkages with peripheral healthcare institutions could help improve assessing long-term survival and improving coverage of community-based screening could improve early detection.

MISCELLANEOUS

MISC 001

Prospective study of gustatory dysfunction due to chemotherapy using “taste strips”

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Background: Anorexia is a multifactorial problem faced by patients on chemotherapy which has far reaching consequences on nutrition, therapy related toxicity, and possibly even on cancer related outcomes. One of the contributors of anorexia is taste changes induced by chemotherapy as well as supportive care drugs like steroids. There are few studies looking at this issue, especially in the Indian context.

Methods: We designed a longitudinal study, where adult patients with newly diagnosed cancer were recruited and underwent assessment of gustatory function using the “taste strip” method. We excluded patients on concurrent radiation, or those receiving nutrition via a route other than orally. Sixteen strips with 4 different concentrations of each of the 4 basic tastes of sweet, sour, bitter and salty were used for the assessment. The assessments were done prior to cycle 1 of chemotherapy and repeated prior to cycle 2 to understand the change in taste levels induced by chemotherapy. Analysis of total taste score was done using the paired t test. The change in proportion of patients with hypogeusia (defined as a score of less than 9/16) was analysed using the chi square test.

Results: We recruited 129 patients at baseline, of which 91 were evaluable after chemotherapy for change in taste. The total taste score significantly reduced from a mean of 13.26 before chemotherapy to 11.9 after chemotherapy ($p = 0.000009$). Looking at individual taste elements, there was significant reduction in score of the sweet (3.4 before to 3.6 after $p = 0.003$) and salty tastes (3.25 before to 2.62 after, $p = 0.00001$), while the taste scores for bitter (3.24 before to 3.05 after, $p = 0.09$), and salty (3.37 before to 3.15 after, $p = 0.08$) were not significantly reduced. There was a significant increase in the proportion of patients with hypogeusia after chemotherapy [hypogeusia prior to start: 2/91 (2.1%) vs. 10/91 (10.9%) after 1 cycle ; p value=0.017)].

Conclusion: Chemotherapy causes significant reduction in taste perception which is more for sweet and sour tastes. The proportion of patients with hypogeusia increased five-fold after just 1 cycle of chemotherapy. This is the first study to objectively demonstrate loss of gustatory function in Indian patients on chemotherapy. This data could serve as a basis for future intervention studies in this regard.

MISC 002

Optimizing Chemotherapy Delivery: Effective Use of Implantable Venous Ports at Madras Cancer Care Foundation

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Background: Implantable venous ports (IVPs) revolutionize chemotherapy delivery, offering advantages over peripheral lines. This study examines IVP utilization, outcomes, and economic implications at Madras Cancer Care Foundation (VHS).

Objectives: To elucidate IVP utilization patterns, clinical outcomes, and economic dynamics in cancer care.

Methods: A retrospective analysis from December 14, 2021, to May 1, 2024, included 125 patients with IVP implantation. Data were scrutinized for indications, complications, and economic factors.

Results: Breast carcinoma was the leading indication for IVP placement (81 patients), with use in colon (10), rectal (11), and stomach (9) cancers. Complications (n=9) led to 6 IVPs being sacrificed, highlighting IVP resilience. Complications included infections, hematomas, catheter malfunction, and a pneumothorax case. IVPs were crucial for long-term treatments like HER2-positive breast cancer.Economically, each IVP cost INR 15,560, plus Huber needle (INR 504) and Heplock costs. Port installations occurred in a resource-limited surgery setup with operating theater (OT) charges of INR 2,000, pharmacy costs of INR 5,000, and doctor fees of INR 5,000. While the cost is significant, this approach demonstrates prudent resource use and efficiency. Of the 125 patients, 67 were fully supported by the cancare trust, catering predominantly to low-income patients, and the rest received partial support. IVPs offered an effective alternative to peripheral, central and PICC lines, with lower complication rates, better patient comfort, and improved treatment adherence. Ports were primarily from Bard, Aureate, and Vygon.A trained team, including a dedicated surgeon, managed all port installations effectively, ensuring high-quality care in an NGO setting.

Conclusions: IVPs are essential in cancer chemotherapy, combining efficacy and sustainability. Their versatility, effective complication management, and resource-efficient use transform treatment, offering hope and improved outcomes in resource-constrained environments.

MISC 003

Efficacy of Vajrakandi mathirai (Siddha Pill) in the Treatment of Human Papilloma Virus: A Case Study

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Background: Papillomavirus (HPV) is a prevalent viral infection with limited treatment options. This case study reports the intervention of Vajrakandi mathirai (Siddha pill) in treating a patient diagnosed with HPV.

Methods: The patient, a 51-year-old female with no significant medical history, was treated with a Siddha formulation known for its antiviral properties. The patient received the Siddha pill for five days with Pathiyam (salt restricted rice based diet) for seven days.

Results: The outcomes were measured through histo-pathological evaluation of cervix after two months.

Conclusion: The treatment resulted in a significant reduction in viral load and marked improvement in symptoms without adverse side effects. Follow-up over six months indicated sustained health benefits. These findings suggest that Siddha medicine may offer a viable treatment for HPV, warranting further research.

MISC 004

Practice changing tips to prevent port related blood stream infection – single center experience of 69 cases

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Background: Totally Implantable Venous Access Device (TIVAD) also named as Chemoport is very essential to administer long term chemotherapy in cancer patients and prone for infectious complications requiring premature removal of the port. The objective of this study was to analyse the port related infectious complications.

Methods: A total of 69 chemoport system were inserted in various cancer patients from Jan 2022 to May 2024. After initial 20 patients, we developed Standard Operating Protocol (using disposable drapes, first case in theatre after fumigation, Autoclaved Scrubs, Sterile C arm sleeves, Double autoclaved instruments, New Diathermy pencil, unboxing Port after subcutaneous pocket creation, antibiotic prophylaxis and less theatre personnel movement) in every case to prevent infection. Analysis of complications was done before and after protocol.

Results: Out of 69 patients, 8 (11.5%) developed complications. Out of 20 patients before Protocol, 4 (20%) developed Port related blood stream infections. After Protocol incorporation, none out of 49 patients developed infections. Other complications include skin erosion, pneumothorax and deep vein thrombosis. 7 out of 8 patients required premature port removal.

Conclusion: Chemoport requires expert handling, patient and staff education, strict follow up and dedicated teamwork to minimize complications. Each institute should devise a checklist and protocol to ensure there is no breach in asepsis during procedure. There were none infectious episodes after incorporating our protocol.

MISC 005

Anti cancer actvity of Gandhaga Rasayanam (GR) on human breast cancer (Mcf-7) Cells-An Invitro Assay

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Background: Cancer is clinically characterized by uncontrolled cell proliferation with gene level deficit in controlling cell multiplication and tissue growth. Alarming statistic by WHO, breast cancer become the second most commonly diagnosed cancer in females. Over 2.3 million new cases and 6,70,000 deaths occurred in 2022 . In the present scenario, increased adverse events towards conventional chemotheraphy and repeated desensitization of tumour cells towards radiation often delays therapeutic benefits, this grabs the attention of the researcher in the field of cancer biology to explorate the alternate drug of choice which may devoid of side effects.

Objective: Siddha drug Gandhaga Rasayanam(GR) is indicated for treating leucoderma, piles, psoriasis, skin infections as per the siddha text *siddha vaithiya thiratu.* The drugs present in GR possess anti cancer properties, Present study aimed at exploring the assessment of cell viability and cytotoxicity of this novel formulation using MCF-7 breast cancer cell line by in-vitro MTT assay.

Method: MTT assay was performed to measure the cell viability and cytotoxicity in MCF-7 cell line.

Results and conclusion: It was concluded that GR possess a dose dependent cytotoxicity effect in MCF-7 cells , where the percentage of cell viability at IC50 is 100µg/ml, which shows that GR is a promising candidate for further studies on breast cancer.

MISC 006

Effectiveness of traditional siddha medicine (TSM) in managing the Recurrent Anaplastic Astrocytoma – a case report

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Background: Anaplastic Astrocytoma is a relatively rare cancer and is associated with a median life expectancy of 3 years after conventional therapy. The chance of recurrence and spread is significantly higher in these type of cancers. Management of progressive life threatening conditions like cancer through TSM either independently or in integration with conventional approaches remains poorly documented. This case report explains the effectiveness of Siddha medicines in managing and improving the survival rate of Anaplastic Astrocytoma patient.

Objective: To present the case of Recurrent Anaplastic Astrocytoma managed by TSM along with conventional care

Case Description: A 39 years old female, known case of Left frontal Anaplastic Astrocytoma (AA), underwent surgical resection, adjuvant chemo and radiation in the year 2018. Again there was a recurrence of AA and underwent surgical resection for the second time in the year 2020. During her regular follow up, radiological investigations shown that there was recurrence of AA again and then she approached Cancer Special OPD of AAGHIM, Chennai for further management with the complaints of urinary incontinence, difficulty in walking, forgetfulness and low back ache which made her to stay in a lying position. Siddha medicines *Brahmi nei, Poorna Chanthirothayam, Nandhi mezhugu, Rasaganthi Mezhugu,* and *Amukkura Chooranam* were prescribed.

Result: There was an encouraging result, significant improvements were documented by radiological investigation, general health condition and quality of life was assessed by EORTC QLQ 30 questionnaire.

Conclusion: TSM can play a significant role in managing Cancer either independently or in an integrative approach with conventional therapies.

MISC 007

Management of chemo induced oral mucositis, nausea, vomiting by traditional siddha medicine (TSM) - *neichitti kudineer*

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Background: Chemotherapy and radiotherapy are being widely used for the treatment of cancer. Though these treatment modalities are employed to improve the quality of life of patients, several aftermaths accompany them. Nausea, vomiting and mucositis are the most common symptoms experienced by patients undergoing these conventional therapies. This case report explains the effectiveness of Siddha medicines in managing the aftermaths of chemotherapy.

Objective: To present the case of chemo induced oral mucositis, nausea and vomiting managed by *Neichitti kudineer*, a Siddha Medicine.

Case Description: A 52 years old, female patient who had the past history carcinoma of left breast, underwent mastectomy, chemo and radiotherapy in the year 2018. During follow up, she was found to have the metastatic lesions in L3 vertebrae, sternum and liver, so she was advised to take chemotherapy again. While taking chemo, patient had the symptoms of oral mucositis, nausea, vomiting, myalgia and loss of appetite. Patient approached Cancer Special OPD where we treated her with Siddha medicines like *Neichitti kudineer* and *Amukkura legiyam* (Internal), *Venkaara mathu* (Topical application), Decoction of *Thiripala chooranam* (Mouth wash).

Methodology: WHO questionnaire for mucositis assessment was used to analyze the severity of oral mucositis and RINVR questionnaire was used to analyze the severity of nausea & vomiting before and after administering Siddha medicines.

Result: There was a significant decrease in RINVR score and oral mucositis was also reduced. So, the patient was able to withstand chemotherapy. This was further evidenced by the testimonial given by patient.

Conclusion: TSM can play a significant role in managing the aftermaths of conventional therapies. Integrative patient centric holistic approach is needed for the betterment of the society.

MISC 008

Oral dysbiosis, the founta inhead of gastrointestinal cancer: A novel comprehensive meta-evidence

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Background: Poor oral health and oral dysbiosis were found to be associated with cancers, especially of the gastrointestinal system. But the cause-and-effect relationship and the effect of the risk are not yet known due to scarcity of literature. Understanding such risk relationship can contribute to an integrated multidisciplinary approach for gastrointestinal (GI) cancer prevention.
Aim: Aim of the present systematic review and meta-analysis is to assess the role of oral dysbiosis on increasing the risk of digestive system cancers.
Objective: To evaluate the effect of poor oral health on increasing the risk of gastrointestinal cancers.

Methods: A systematic search following PRISMA guidelines in databases PubMed, Elsevier, Wiley's online library and Web of Science from inception to February 2023 to include recent cohort studies that assessed the association between poor oral health and the risk of cancer was conducted. Assessment of bias using the New Castle Ottawa scale. Analysed for inferential statistics to describe the effect of oral dysbiosis on gastrointestinal cancers. Also, a sub-group analysis to assess the effect of oral conditions on individual cancers was carried out.

Results: 10 longitudinal studies were included in the meta-analysis. The overall effect size of poor oral health and gastrointestinal cancer risk was hazard's ratio (HR) =1.30 [95% CI; (1.14, 1.46)], ($p<0.001$), (I^2 =68.78). Sub-group analysis indicated that poor oral health increases the risk of esophageal cancer HR=1.61 [95% CI; (1.37, 1.85)], stomach cancer HR=1.33 [95% CI; (1.08, 1.58)], pancreatic cancer HR=1.90 [95%CI; (1.29, 2.50)], colorectal and hepatocellular carcinoma HR=1.16 [95% CI; (1.08, 1.23)].

Conclusion: The meta-analysis indicated that poor oral health was significantly associated with increasing the risk of gastrointestinal cancers.

MISC 009

Role of Simarouba glauca and its anti-microbial and anti-cancerous action through various microbial studies - A Systematic review

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Abstract: Cancer, precancerous conditions, and other related ailments continue to be significant global health concerns, prompting researchers to investigate alternative treatment options. One potential candidate that has gained attention for its antiproliferative and chemoprotective properties is Simarouba glauca, commonly known as paradise tree native to Central and South America holds various importance due to its diverse array of medicinal properties.Studies have shown that various bioactive compounds present in Simarouba glauca, such as flavonoids and limonoids, exhibit promising anticancer effects by inhibiting the growth of cancer cells and inducing apoptosis. The plant's potent antioxidant properties can also help protect against oxidative stress, a key factor in carcinogenesis. As such, Simarouba glauca shows promise as a natural agent for combating oral cancer and other types of malignancies. Furthermore, research on Simarouba glauca's potential as an anticancerous agent has highlighted its ability to suppress inflammation, inhibit angiogenesis, and modulate various signaling pathways associated with cancer progression.

The plant's bioactive components have been found to target specific molecular mechanisms involved in tumor development and metastasis, making it a valuable candidate for developing novel therapeutic strategies against oral cancer. In addition to its cytotoxic effects on cancer cells, Simarouba glauca has also been shown to enhance the efficacy of conventional chemotherapeutic agents, suggesting its potential utility in combination therapy approaches. Overall, the scientific evidence supporting the antitumor properties of Simarouba glauca underscores its significance in the search for effective and safe anticancer treatments. The present study is a systematic review of Role of Simarouba glauca and its anti-microbial and anti-cancerous action through various microbial studies.