have an excellent Performance Status (ECOG score 0 or Lansky/Karnofsky ≥ 90), 5 (14.2%) scored ECOG 1–2 and only 4 (11.4%) scored ECOG 3–4. CONCLUSIONS: A multidisciplinary approach with a focus on Performance Status and the potential for neurological recovery is essential in the management of pediatric patients with CNS tumors. Efforts should be aimed at reducing post-surgical morbidity and early rehabilitation to reintegrate patients into society in the long term.

LINC-40. VERY YOUNG PATIENTS AND CENTRAL NERVOUS SYSTEM TUMORS: A SINGLE-CENTER EXPERIENCE IN AN UPPER-MIDDLE-INCOME COUNTRY

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Tumors of the central nervous system comprise nearly a quarter of all childhood cancers and are the most frequent solid tumor in the pediatric population. Primary central nervous system tumors (PCNST) are a rare and heterogeneous group of tumors responsible for high mortality and morbidity. Around 10% of primary CNS tumors occur during the first year of life with almost half of them during the first six months. About 18% of these tumors appear before the age of two years. Very young children differ from older children and adolescents regarding the incidence and location of different histological entities of CNS tumors. We aimed at providing descriptive epidemiological data and report the outcome in a tertiary center from December 2013 to January 2020 for all histological subtypes of primary central nervous system tumors in very young patients, defined as patients younger than three years. We collect data from 19 patients treated in an oncology exclusive tertiary center in Mexico between 2013 and 2020. This study aims to relate factors such as age, radiotherapy, surgery, chemotherapy with Lansky Performance Scale and determine the impact, not only in the overall survival but also in the quality of life.

LINC-41. TREATMENT OF RECURRENT MEDULLOBLASTOMA IN CHILDREN IN LOW INCOME SETTINGS

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INTRODUCTION: Children with recurrent medulloblastoma after initial therapy have very poor prognosis due to limited second line treatment options and significant treatment-related morbidity. METHODS: A retrospective chart review of 18 children with recurrent or progressive medulloblastoma, treated initially with risk-adapted therapy in Western Ukrainian Specialized Pediatric Medical Centre from 2012 to 2019, was performed. RESULTS: All patients received first line multimodal treatment: surgery, distant beam radiotherapy and chemotherapy. Recurrent disease in 11 patients presented with metastatic dissemination and in 7 patients as local relapse. The median time to recurrence was 10 months. The median follow-up after diagnosis of recurrent disease diagnosed was 2 years and 2 months. Second line therapy included re-surgery (5 cases), radiation therapy (10 cases) and various cytostatic agents as monotherapy or combination - carboplatin, cisplatin, cyclophosphamide, etoposide, methotrexate, temozolomide, lomustine. Patients treated with radiotherapy for salvage had prolonged local control compared to those that received chemotherapy only. On follow-up 8 children are currently alive. CONCLUSION: Recurrent and progressive medulloblastoma had a poor prognosis with a 2-year overall survival (OS) of 28% on different salvage therapy. The variety in the treatment of all patients experiencing recurrence was observed due to low income country settings. The factors that influenced higher survival after recurrence of medulloblastoma were longer time to relapse, and local pattern of relapse/progression.

LINC-42. EPIDEMIOLOGICAL OVERVIEW OF CHILDHOOD CNS TUMORS IN THE NEUROSURGICAL UNIT IN YEREVAN, ARMENIA

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BACKGROUND: Central nervous system (CNS) tumors are the second most common malignant neoplasms among children worldwide. The current paper aims to analyze the situation in pediatric neuro-oncology in Armenia from the neurosurgical perspective. METHODS: We have collected data of pediatric patients with CNS tumors treated in the Neurosurgery department of "Surb Astvasamayr" Medical Center from 01.01.2010 till 01.12.2019. Incidence by gender, age at diagnosis, and histopathology results were calculated. Survival rates were calculated based on the follow-up results performed until 30.12.2019. RESULTS: Hospital-based data showed that during the previous 10 years 47 patients with CNS tumors received neurosurgical treatment in the unit, among them 66% were females. 38.3%, 31.9% and 29.8% of diagnosed patients were aged 0–4, 5–9, and 10–18 respectively. In 41 cases, the disease was not disseminated at diagnosis. The most common observed malignancies were low-grade gliomas (21.3%) and embryonal tumors (19.1%), followed by high-grade gliomas (14.9%) and ependymal tumors (8.5%). Follow-up information only for 33 patients is available. From them, 14 are dead and 19 alive. Survival rates in most common groups were 62.5%, 80%, 50%, and 50% respectively. The median follow-up time was 18 months (range 1–113 months). CONCLUSION: Similar to the data reported in the literature, low-grade gliomas, and embryonal tumors are the most frequent pediatric CNS tumors in Armenia. On the other hand, the pediatric CNS tumor survival rates are lower compared to those reported in developed countries.

LINC-43. FACTORS LEADING TO DIAGNOSTIC DELAY FOR CHILDREN WITH PRIMARY TUMORS OF CENTRAL NERVOUS SYSTEM (CNS) IN QATAR

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INTRODUCTION: Median time to diagnosis for primary CNS tumors for children in Qatar has been reported to be 28 days. However, a wide variation in diagnostic times is seen. This study was undertaken to analyze the factors leading to delay in diagnosis. METHODS: Data were retrospectively analyzed for children who had diagnostic delay (more than 28 days) from September 2006 to February 2020. Presenting symptoms, number and type of healthcare contacts and presenting symptom interval (PSI) were reviewed. Parental delay (PSI-1) was defined as the date of onset of first symptom to the date of first healthcare contact. Healthcare delay (PSI-2) was defined as date of first healthcare contact to the date of diagnostic scan. RESULTS: Twenty-four patients were identified with diagnostic delay. Median age at diagnosis was 48.2 (range 5.4–171.6) months with an equal sex distribution. Fifteen (62.5%) patients were older than 3 years, 13(54%) patients had low grade glioma, 16 (66.7%) had supratentorial tumors and 12 (50%) presented with raised intracranial pressure. Diagnosis was made after a median 3 (range 1–8) healthcare contacts. Nineteen (79%) patients presented to primary care. Median PSI was 132 (31–783) days. Parental delay (PSI-1) was 35 (0–496) days, while healthcare delay (PSI-2) was 41 (0–562) days. Endocrine (241 days) and oculo-visual (184 days) symptoms were associated with the longest PSI. CONCLUSIONS: There was no significant difference between parental and healthcare delay. Endocrine and oculo-visual symptoms were associated with longest PSI. Increased awareness is required for early recognition of signs suggestive of CNS tumors.

MEDULLOBLASTOMA (CLINICAL)

MBCL-01. METHYLATION PROFILING OF PEDIATRIC MEDULLOBLASTOMA IN SAUDI ARABIA IN A CLINICAL SETTING PERMITS SUB-CLASSIFICATION AND REVEALS NEW OUTCOME PREDICTIONS

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Medulloblastoma (MB) is the most common childhood malignant brain tumor. DNA methylation profiling has rapidly advanced our understanding of MB pathogenesis at the molecular level, MBs can be sub-grouped according to methylation patterns from FPPE samples into Wingless (WNT-MB), Sonic Hedgehog (SHH-MB), Group 3 (G3) and Group 4 (G4) WNT-MB and SHH-MB subgroups are characterized by gain-of function mutations that activate oncogenic cell signalling whilst G3/G4 tumors show recurrent chromosomal alterations. each subgroup has distinct clin-