

Hospital has the expertise to build a comprehensive neuro-oncology program. The program currently lacks a dedicated nurse coordinator and “specialist” in neuro-oncology. Ongoing discussions with local stakeholders are aimed to galvanize national support to improve awareness for children with brain tumors and to plan a multidisciplinary neuro-oncology symposium in 2021. In the meantime, telemedicine efforts can support nursing education and reiterate the multidisciplinary needs for children with brain tumors.

#### LINC-33. MULTIMODALITY MANAGEMENT OF PAEDIATRIC PRIMARY CENTRAL NERVOUS SYSTEM LYMPHOMA- UPDATED EXPERIENCE FROM A REGIONAL CANCER CENTRE IN NORTH INDIA

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Paediatric primary central nervous system lymphoma(PCNSL) constitutes 1% of all PCNSLs. Data pertaining to paediatric PCNSL (2016–19) was abstracted by retrospective chart review. We identified 7 paediatric patients with PCNSL. None had congenital or acquired immunodeficiency. The median age at presentation was 13 years. The male to female ratio was 4:3. The median ECOG performance status was 2. On neuro-imaging, 3 patients had solitary and 4 patients had multiple lesions. CSF cytology showed atypical cells in 1 patient. None had ocular involvement. Systemic lymphoma work-up was negative in all. Biopsy and resection of tumour were done in 4 patients each. Histopathology revealed DLBCL in 6 and B-cell NHL in 1 patient. All patients underwent induction chemotherapy (median-5 cycles)- modified DeAngelis protocol (IV Methotrexate-2.5g/m<sup>2</sup>, IT Methotrexate-12 mg, Vincristine, Procarbazine and Rituximab-375mg/m<sup>2</sup> every 2 weeks) in 6 and single agent Methotrexate -3.5g/m<sup>2</sup> every 3 weeks in 1 patient. Severe haematological toxicities included grade 3 neutropenia, leucopenia and febrile neutropenia in 2, 1 and 1 patient respectively. Radiotherapy(RT) was administered in all-whole brain RT(36-45Gy/20-25fractions/4-5weeks) in 6 patients and craniospinal RT(36Gy/18fractions/3.5weeks) followed by whole brain RT(9Gy/5fractions/1week) in 1 patient(with positive CSF cytology). Subsequently consolidation chemotherapy with 2 cycles of Cytarabine(3g/m<sup>2</sup> IV D1-2 every 3 weeks) was administered in 5 patients. After a median follow-up of 14 months(mean-18.2 months), all patients are in complete radiological remission. Paediatric PCNSL is a rare tumour entity and multimodality management with high dose Methotrexate and Rituximab based chemo-immunotherapy and cranial radiotherapy leads to excellent early clinical outcome.

#### LINC-34. OPTIC NERVE INFILTRATION: RARE MANIFESTATION OF CHILDREN WITH ACUTE LYMPHOBLASTIC LEUKEMIA IN REMISSION

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**BACKGROUND:** Optic nerve infiltration in acute lymphoblastic leukemia is a rare manifestation. This infiltration may appear months in advance as an isolated sign of extramedullary relapse and considered as one of the significant clinical findings of central nervous system leukemia. **AIM:** To describe a case of rapidly progressive optic nerve infiltration in a girl with ALL in remission. **CASE:** A 13-year-old girl in full remission following treatment for B-cell acute lymphoblastic leukemia presented with decreased vision and proptosis on the left eye. She completed the chemotherapy course two years before. On physical examination, we found the optic disc swelling in her left eyes. There were no signs of relapse from the hematological, cerebrospinal fluid analysis, and bone marrow aspiration. The orbital CT found a mass on the left retrobulbar (size 29x48x32 mm), suspected of optic nerve glioma. The mass has grown rapidly in a month, and she lost her left sight. The involved eye was exenterated (60x55x40 mm). The histopathology and immunohistochemistry showed the B-cell acute lymphoblastic lymphoma. Unfortunately, the patient could not come for further follow up due to the COVID-19 large-scale social distancing. Two months later, she came with pallor and pain in all of her body. The bone marrow aspiration showed leukemic relapse and she is undergoing chemotherapy. **CONCLUSION:** Optic nerve infiltration by leukemia requires both diagnostic certainty and urgent management. A routine ophthalmic assessment is recommended in patients with a history of acute lymphoblastic leukemia to diagnose optic nerve involvement due to leukemic infiltration.

#### LINC-35. THE ST. JUDE GLOBAL ACADEMY NEURO-ONCOLOGY TRAINING SEMINAR: A MULTIDISCIPLINARY, INTERNATIONAL EDUCATION PROGRAM

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The success of the treatment of children with central nervous system (CNS) tumors relies on an effective multidisciplinary team, with up-to-date

and broad knowledge and skills. The St. Jude Global Academy Neuro-Oncology Training Seminar was launched as course in globally applicable content in pediatric neuro-oncology with a focus on multidisciplinary teams in low- and middle-income countries (LMICs). To identify the content that is most relevant for the learners, a needs assessment survey that included evaluation of team dynamics, treatment capacity, existing knowledge, and educational goals was designed. Survey questions in 11 domains were answered by 24 sites in LMICs across the world. This information was used to create the course that consists of two components: a 9-week on-line course and a 10-day workshop at the St. Jude campus. 72 participants from 11 institutions enrolled in the online portion and 20 participants were selected based on grades to attend the workshop. A retrospective post-test evaluation established that learners improved their understanding of the barriers to care, possible solutions to improve care, understanding of diagnosis and treatment, and methodology to implement projects ( $p < 0.01$ ). All participating teams developed projects that are locally implemented. Those present at the workshop formed a multidisciplinary, international collaborative group (Global Alliance in Pediatric Neuro-Oncology). This experience establishes that educational programs with systematically created curricula can not only improve knowledge but be a mechanism to share experiences and create collaborative networks. Ultimately, patient outcomes will be tracked to monitor the true impact of the course.

#### LINC-36. TRILATERAL RETINOBLASTOMA: A REPORT OF FOUR CASES

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Retinoblastoma is the most common primary malignant intraocular cancer that usually develops in early childhood. About 5% of those patients are at risk of developing trilateral retinoblastoma (TRB). In developing countries, most of them came in the late stage; therefore, ocular and patient survival rates are lower than in developed countries. From 2015–2019, we found four cases of trilateral retinoblastoma. Two of them had bilateral retinoblastoma, and two had unilateral retinoblastoma. They all presented with leukocoria and had no family history of retinoblastoma. The mean age was 13.8 months (range 9–24 months of age). The diagnosis of trilateral retinoblastoma was made from initial head CT/MRI. They were treated conservatively with high dose VEC chemotherapy, and three of them have died during treatment. Trilateral retinoblastoma is usually fatal and needs multidisciplinary treatment care. In developing countries, it is important to evaluate distant metastasis. Head CT or MRI from the initial diagnosis to exclude the trilateral retinoblastoma.

#### LINC-38. 500 CONSECUTIVE SURGICAL CASES FROM THE PEDIATRIC ONCOLOGY NEUROSURGERY GROUP: UNDERSTANDING THE PERSPECTIVE OF A TERTIARY CENTER IN BRAZIL

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With this presentation we aim to present cases submitted to surgery by the same group of surgeons since 2010, presenting the physical structure, medical assistance, scientific production and the challenges that we need to overcome in the second decade of the twenty-first century, in a developing country.

#### LINC-39. PERFORMANCE STATUS OF PEDIATRIC PATIENTS WITH CENTRAL NERVOUS SYSTEM TUMORS TREATED IN MEXICO, A SINGLE-CENTER EXPERIENCE

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**BACKGROUND:** Central nervous system (CNS) tumors are the most common solid neoplasms in the pediatric age, they comprise about a quarter of all cancers at this age. Little is known about the specific epidemiology of this group in Mexico and there are no reports of results focused on the Performance Status of patients who are treated in a multidisciplinary setting. **OBJECTIVE:** To describe the Performance Status of CNS pediatric patients after being treated with a multidisciplinary approach in a tertiary center. **METHODS:** We report a retrospective chart review of all pediatric patients who presented to the Neuro-Oncology Clinic at Teleton Pediatric Oncology Hospital in Queretaro, Mexico, from December 2014 to January 2020. We analyzed age, gender, the extent of surgical resection and histopathology. Performance Status was assessed using ECOG and Karnofsky/Lansky scores during every patient's last follow-up visit. **RESULTS:** A total of 56 patients were treated, epidemiology and histopathology variants are similar to those described in the international literature. With a median follow-up of 33 months, 35 patients are alive (62.5%), 28 of them (74.2%)