institutions in Argentina between 2007–2019. Translocation was evidenced in all cases through molecular testing. Clinical characteristics, imaging, histopathology, and treatment response were evaluated. Extracranial and osseous lesions were excluded. RESULTS: 15 patients. Median age at beginning of symptoms: 8 yo (2–20). Most patients had intracranial hypertension syndrome (14/15). In brain MRI, 5/15 supratentorial lesions, 4/15 posterior fosa, 1/15 medullary, 2/15 supra and infratentorial, and 3/15 lesions diffuse leptomeningeal infiltration. Histopathologic findings showed diffuse pattern with small round blue cells in most cases, other patterns were also described. CD99 marked positive in all cases. Misdiagnosis with glial tumors (4/15), medulloblastoma (6/15) and infectious diseases (3/15); led to median delay to accurate diagnosis of 3 months (range 0–67). After correct diagnosis patients were treated with standard ES treatment (6 VIDE cycles plus radiotherapy) in 14/15 patients. Vincristine, irinotecan and temozolamide was used as second line treatment in all relapse cases whenever possible. EFS was 22 months (2- 65). OS at 5 years of follow-up was 46,67% (mean OS 31 mo). CONCLUSION: Even though molecular assessment led to accurate diagnosis in all cases, treatment response and outcome showed two different groups of patients with long and very short survival. Adaptative therapy should be considered.

LINC-06. OBSERVATION ONLY IN A PATIENT WITH SUSPECTED LOW GRADE GLIOMA. SHOULD NEUROSURGERY ALWAYS BE THE FIRST STEP IN LOW AND MIDDLE INCOME COUNTRIES?

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BACKGROUND: Low grade gliomas (LGGs) are the most frequent pediatric brain tumor and they comprise a variety of histologies. Complete surgery is curative but sometimes its location makes it difficult. Recent publications highlight the excellent long-term outcomes of patients with LGGs with complete and incomplete resected tumors. Current strategies are focused on reducing risks of treatment related sequelae. METHOD: We describe a patient with a suspected LGG managed by close observation. We describe the case of a 6 year old female with 5 months history of focal onset seizures. During this time a brain MRI was requested and tumor was evidenced. After "tumor diagnosis" was made family visited a handful of private neurosurgeons with a uniformly dismal prognosis and high risk morbidity from procedures offered. When first seen at our Hospital, the clinical history seemed compatible with a LGG and seizures well controlled with antiepileptic drugs. Neurological examination was completely normal. MRI showed a large tumor (7x5x5 cm) hypointense on T1, hyperintense on T2, without contrast enhancement, involving the right temporal lobe white matter, insula, internal capsule, hipoccampus, thalamus and mesencephalus with middle cerebral artery encasement. Interval imaging was proposed and after 4.5 years since diagnosis the tumor has been stable and patient clinically excellent. CONCLUSION: Overall survival in pediatric LGGs is excellent and risk of sequelae should always be part of multidisciplinary team considerations. In centers with significant neurosurgical morbidity, biopsy of large tumors that are compatible with LGG may not be required in selected cases.

LINC-07. PREVALENCE AND SPECTRUM OF EARLY ENDOCRINE DISORDERS IN SURVIVORS OF PEDIATRIC EMBRYONAL BRAIN TUMORS (PEBT): EXPERIENCE FROM INDIA

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BACKGROUND: Survivors of pediatric brain tumors are at high risk of developing endocrine disorders, potentially impacting growth,development and quality of life. METHODS: etrospective audit of 2-year survivors of PEBT(3-18years at diagnosis)viz. medulloblastoma(MB),Central nervous system Primitive neuro-ectodermal tumors(CNS-PNET) and atypical teratoid/rhabdoid tumor(ATRT) treated January 2006-December 2017 at Tata Memorial Centre,Mumbai, with surgery, cranio-spinal irradiation(CSI; 35Gy in high-risk MB,CNS-PNET,ATRT and 23.4Gy in average-risk MB with tumor boost 19.8Gy)and six cycles of adjuvant chemotherapy(cycloph osphamide,cisplatin and vincristine).Patients were followed up by a paediatric endocrinology team specialized in management of PEBT. RESULTS: Of 249 PEBT treated during this period,88 are alive in remission >2 years (69-MB, 15-CNS PNET,4-ATRT),median age at diagnosis 6 years. At a median follow-up of 5.6 years (range 3- 12.5years),63 patients(72%) had at least one endocrine disorder,26(29.%)≥2 hormonal deficiencies. The most common endocrine disorders were central hypothyroidism(57%),growth hormone deficiency(40%), central hypogonadism(5%)and central hypoadrenalism (3.5%).The median time to develop hypothyroidism was 2.8 years(range 5months to 8.5 years) from CSI. Growth hormone replacement therapy began after a median period of 4.2 years(range-1.5 to 11.5years) from CSI. Higher dose of CSI was associated with development of endocrine disorder (odds ratio [OR] 2.71; 95% CI, 1.03 to 7.04,p-0.04). CONCLUSIONS: The high incidence of endocrine deficits in survivors of PEBT necessitates early and lifelong monitoring. Early and appropriate management is crucial to achieve full growth potential.

LINC-08. INCREASED TREATMENT TOXICITIES AND INFERIOR OUTCOMES IN UNDERNOURISHED CHILDREN WITH BRAIN TUMOURS

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BACKGROUND: Children on treatment for brain tumours are known to be at high risk of undernutrition, the impact on outcome and toxicity is not well understood. METHODS: Retrospective audit of children(<18 years) diagnosed January 2017-December 2018 with embryonal brain tumours (medulloblastoma, primitive neuro-ectodermal tumors, pinealoblastoma, atypical teratoid/rhabdoid tumour) and treated at our centre. Data was retrieved from case records and electronic medical records. Nutritional status(NS) was defined as per World Health Organization (WHO) into severe malnutrition (SAM),moderate malnutrition (MAM),well nourished (WN) and overweight. Undernutrition(UN) was defined as SAM/MAM.Toxicity was documented till end of treatment,defined as treatment delay>1week,significant infection or toxic death. RESULTS: Of 124 eligible patients who received entire chemotherapy at our centre, NS data was available in 73 at diagnosis and 58 at follow-up. At diagnosis-29,16,26 and 2 and at follow-up-20,16,22 and 0 were SAM,MAM,WN and overweight. During treatment, weight gain was documented in 26%, stable weight in 55% and weight loss in 19%. Those UN at diagnosis had worse outcomes at follow-up with 70% alive in remission compared to 88% of WN(p-0.14). There was increased toxicity in UN group(50%) compared to WN(24%),p-0.04.All 3 toxic deaths were in UN. Those who lost weight during treatment had higher toxicities(70%) compared to those with stable weight (30%)or weight gain(20%),p-0.02. CONCLUSIONS: In spite of nutritional intervention, children on treatment for brain tumours tend to lose weight. Increased treatment toxicities and inferior outcomes in undernourished children with brain tumours necessitates proactive and aggressive nutritional monitoring and intervention.

LINC-09. TREATMENT AND OUTCOME IN CHILDREN WITH LOW-GRADE GLIOMAS IN WESTERN MEXICO: EXPERIENCE AT HOSPITAL CIVIL DE GUADALAJARA

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BACKGROUND: Brain tumors are the most common solid tumors in childhood, 35% of them being low-grade gliomas (LGGs). Few data is available regard LGGs in low-and-middle-income countries. This study evaluates LGGs in a tertiary center in Mexico. DESIGN: A retrospective review of clinical files of 105 children diagnosed with LGG other than optic nerve glioma from 2007 to 2019 was done. RESULTS: Median age at diagnosis was 7.2 years (from 5 months to 18 years). Male to female ratio was 0.75:1. WHO Grade I represented 68% of the cases. Anatomic sites were: posterior fossa (41%), supratentorial (43.5 %), spinal (8.5%), subependymal (6 %) and pineal (1%). Ten percent of patients had a diagnosed phacomatosis. Treatment was observation without surgery in 3.8%, surgery followed by observation in 49.5%, only chemotherapy in 2.8%, only radiotherapy in 6.7%, and surgery combined with chemotherapy or radiotherapy in 37.2% of cases. Among patients who had surgical intervention, 40% achieved gross total resection, 44% subtotal resection and 16% only biopsy. One or more recurrences were found in 20 % of patients. The 5 and 10-year overall survival (OS) was 83% and 73% respectively. The 5 and 10-year progression-free survival (PFS) was 66 % and 44 % respectively. CONCLUSIONS: In this series the OS were lower compared with countries with high income, reflecting the need to improve surgery, since only 40% achieved complete resection that is a determining factor for the prognosis. We observed a decrease in OS until 10-year follow and the PFS was even lower due to recurrence/progression.

LINC-10. SIOP PODC ADAPTED TREATMENT GUIDELINES FOR CRANIOPHARYNGIOMA IN LOW- AND MIDDLE-INCOME SETTINGS

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Pediatric craniopharyngioma is a rare tumor with excellent survival but significant long-term morbidities due to the loco-regional tumor growth or secondary to its treatment. Visual impairment, panhypopituitarism, hypothalamic damage and behavioral changes are amongst the main challenges. This tumor should be managed under the care of a multidisciplinary team to determine the optimum treatment within the available resources. This is particularly important for low middle-income countries (LMICs) where resources are variable. We provide a risk-stratified management guideline for children diagnosed with craniopharyngioma in a resource limited setting based on the service levels describing the facilities and personnel required for management as previously specified by the Pediatric Oncology in Developing Countries (PODC) committee of The International Society of Pediatric Oncology (SIOP). A multi-disciplinary group of neurosurgeons, radiation and pediatric oncologists, radiologists, pediatric endocrinologists and an ophthalmologist with experience in managing children with craniopharyngioma in LMIC setting was formed and carried online meetings to form a consensus guideline. The clinical characteristics (including the visual and endocrine presentations), suggestive radiological features as well as potential treatment options including surgery, radiotherapy and intra-cystic therapies were discussed in depth and in relation to available resources. In addition, hormonal management, pre- and post-operative PICU care and expected future complications related to craniopharyngioma and to follow up these children were discussed and documented in the guideline. We believe this guideline is a useful reference for health care providers in LMIC.

LINC-11. NEUROPATHOLOGY REVIEW OF LATIN AMERICAN CHILDHOOD AND ADOLESCENT BRAIN TUMOR PATIENTS: A MULTI-NATIONAL, MULTI-DISCIPLINARY PEDIATRIC NEURO-ONCOLOGY TELECONFERENCE EXPERIENCE

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BACKGROUND: Pediatric brain tumor classification has undergone significant evolution over the last decade requiring a high-level of expertise and diagnostic techniques. Such advances have created challenges for pathologists particularly in low-to-middle income countries (LMIC). We conduct weekly pediatric neuro-oncology teleconferences linking global pediatric neuro-oncologists from high-income countries (HIC) to review patients with pediatric subspecialists from Latin America. METHODS: Three to five patients are discussed weekly and second neuropathology review is offered when a high-level of suspicion emerges of a questionable diagnosis based on clinical and radiographical information. Nationwide Children's Hospital (NCH) provides second neuropathology review at no cost to institutions in Latin America that fulfill these criteria. RESULTS: From July 2015 to December 2019 NCH reviewed 54 pathology samples from eleven Latin American countries. Of these, 33 (61.1%) cases resulted in diagnostic changes, of which 28 (51.8%) were significant, impacting treatment plans and overall patient outcomes. The remaining 21 (38.9%) confirmed institutional diagnosis; however, in eight of these 21 cases additional molecular information and/or further tumor subtyping unavailable in their home country at the time (eg: BRAF, RELA-fusion, medulloblastoma subtyping) was provided. CONCLUSIONS: This study highlights the importance of centralized pathology review by institutions with the proper equipment, infrastructure and expertise in pediatric neuropathology. Furthermore, this documents the beneficial impact of teleconferencing for subspecialists in LMIC who must treat a wide variety of pediatric cancers with few resources and support. Additionally, our findings underscore the need for pediatric subspecialty training in LMIC.

LINC-12. COMBINED ADULT AND PAEDIATRIC NEURO-ONCOLOGY LONG-TERM SURVIVOR CLINIC EXPERIENCE FROM A TERTIARY CANCER CENTRE IN A LOW-MIDDLE-INCOME COUNTRY

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NeuroOncology survivor clinics (NOS) is uncommon in low-middle-income countries. We started combined (paediatric and adult) NOS clinic in our tertiary a cancer centre (Jan-2017) and review here the demographic, clinical-pathological and treatment spectrum for our paediatric (0-18years) and adult (>18years) survivors (>5years since their initial diagnosis) till date. Of total 312 patients registered, 198 (63.5%) were adults while 114 (36.5%) were paediatric at-diagnosis with median age (IQR) at presentation: 34 (23–41) and 9(6 – 13) years respectively. In both groups, only 33% were females. The median (IQR) time since diagnosis was 9 (9–14) and 8 (6–12) years respectively with 60% of paediatric turning into adult survivors. The commonest paediatric tumours were glioma (52, 45.6%), embryonal (34, 29.8%), and ependymoma (12, 10.5%) versus gliomas (114, 57.6%) and benign tumours (42, 21.2%) in adults. The low-grade-glioma comprised 90.4% of all pediatric gliomas and intermediate-grade (90%) in adults. The primary treatment consisted of radiotherapy and chemotherapy in 95% and 43% versus 99% and 36% in adults versus paediatric patients respectively. Temozolomide and multi-drug combinations were the commonest chemotherapy used in adults and paediatrics respectively. Relapse and retreatments were seen in 16.6 and 14% of adults and paediatric patients. There were two deaths each in each group since registration (median 12 months). Although the baseline diagnosis/treatment characteristics are different, survivors of both group had a similar number of retreatments and deaths. Combined survivor clinics may present an interesting and unique opportunity to learn and provide challenging service in this part of the world.

LINC-13. THE STATE OF PEDIATRIC NEURO-ONCOLOGY IN ARMENIA

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BACKGROUND: Every year in Armenia we have approximately 80–90 new pediatric cancer cases from which 10–15 are brain tumors (PBT). Here we try to summarize the current state of pediatric neuro-oncology in Armenia. DISCUSSION: In Armenia pediatric neuro-oncology is still in its first steps. Surgical treatment of PBTs is performed only in one medical center – "Sourb Astvatsamayr" Medical Center, with 7 practicing pediatric neurosurgeons. Radiation therapy service with two linear accelerators is located at the "National Oncology Center", however there are no dedicated pediatric radiation neuro-oncologists, and 2 specialists are treating pediatric tumors. Chemotherapy for all pediatric cancers currently is performed at the Pediatric Cancer and Blood Disorders Center of Armenia, established in