SURG-19. COMPLETE RESOLUTION OF ADHD AFTER GROSS TOTAL RESECTION OF DYSSEMBRYOBLASTIC NEOEPITHELIAL TUMOR
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A 3-year-old boy with a history of attention-deficit/hyperactivity disorder (ADHD) presented a single focal tonic seizure. A thorough physical exam-including MRI revealed no neurological deficit. A contrast enhanced MRI showed an isointense lesion in the anterior part of the cingulate gyrus extending through the left frontal lobe. After initial evaluation, the parents refused surgical treatment and a close follow up was then considered. At the age of five, the ADHD became more evident and the patient was started on methylphenida-tate. Poor clinical response was seen with the initiation of stimulant. The boy presented a second generalized seizure and the parents agreed surgical management. An interhemispheric approach was then performed and a gross total resection was achieved. The histopathological diagnosis corresponded to a dyssembryoblastic neuroepithelial tumor (DNET). Four years after the resec-tion, the patient is seizure free and the ADHD has also resolved without the need of medication. The disappearance of seizures is common after surgical resection of DNET tumors, but this case establishes an association with ADHD.

SURG-20. DIENCEPHALIC SYNDROME IN PEDIATRIC NEUROSURGERY
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This report details the histories of twelve patients with clinical dienecph-alic syndrome who collectively demonstrate the variability found in the syndrome with respect to: (1) clinical course, (2) site of the tumor, and (3) ease of obtaining radiologic confirmation of the presence of a tumor. Timely diagnosis of dienecphalic syndrome is not often the case for patients presen-ting with failure to thrive (FTT) because of its rarity and lack of specific symptoms. These cases illustrate the importance of cranial imaging and cons-ideration of dienecphalic syndrome for children presenting with FTT despite normal or increased caloric intake.

SURG-21. ENDO- AND EXOSCOPIC SURGERY FOR PEDIATRIC NEUROSURGICAL OPERATION
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INTRODUCTION: Recently endo- and exoscopic surgeries have been gradu-ally performed in neurosurgery. To improve the accuracy and safety of our endoscopic procedures, we are currently testing 4K or 8K systems. Here we re-por t our experiences of endo- and exoscopic procedures for pediatric neurosur-gery. METHODS: We retrospectively identified 22 patients (15 males, 7 females; mean age, 9.2 years) who underwent surgery for sellar lesions and intraventricular neoplasm. A 4K system (Sony and Olympus) was used as the endoscope. Videoscope (Olympus) was used as a flexible scope for intraventricular tumors. RESULTS: We performed surgical procedures as 11 biopsies, 6 third ventriculostomies, 5 resections, and 5 fenestrations. The full HD system with organic EL monitor presented high color contrast. We could easily distinguish between tumor microstructure and the normal structure with the 4K system comparing to full HD. Moreover, electronic zoom function enabled us to discriminate tumor boundaries without having to move the endoscope closer. As a result, we could delineate the surgical working space. VITOM 3D was simple to sharpen the focus on the wider surgical field, the zoom function enabled us to discriminate tumor boundaries without having to move the working area. CONCLUSION: In pediatric neurosurgical, endo- or exoscope enables clear visual recognition of a boundary between tumor and normal area.

SURG-22. CEREBRAL SPINE ANEURYSMAL BONE CYST OF A PEDIATRIC PATIENT
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BACKGROUND: Aneurysmal bone cysts (ABCs) are benign, expanding lesions that represent 15% of all primary spine tumors, and only 2% have been found at the cervical level. There are different therapeutic options; the most successful is complete surgical resection. Although not always possible, due to high blood loss that occurs during the procedure, a combination of surgical and other treatments modalities was used in this case as described.

SURG-24. NOVEL MALLEABLE FORCIPES FOR ENDOSCOPIC OPERATIVE MRI IN MANAGING PEDIATRIC CRANIAL NEO-ONCOLOGY CASES
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The University of Malaya Medical Centre, Kuala Lumpur had ac-quired a intraoperative MRI (iMRI) brain suite via a public private initiative in September 2015. The MRI brain suite has a Siemens 1.5T system with NORA coil system and NORA head clamps in a two room solution. We would like to retrospectively review the cranial paediatric neuro-oncology cases that had surgery in this facility in this period. From September 2015 till December 2019. We would like to discuss our experience with regard to the clear benefits and the challenges in using such technology to aid in the surgery. The challenges include the physical limit of the paediatric head size as compared to the MR scanner and as a consequence of this, the simple and as a consequence of this, the preparation and performing the intraoperative scan, the interpretation of intraoperative images and making a decision and the utilisation of the new MRI data set to assist in the navigation to locate the residue safely. Also dis-cuss the utility of the intraoperative images in the decision of subse-quent adjuvant management. The use of iMRI also has other technical challenges such as ensuring the perimeter around the patient is free of ferromagnetic material, the process of transfer of the patient to the scanner and as a consequence of this, the transport of the patient. CONCLUSION: Many elements in the use of iMRI has a learning curve and it improves with exposure and experience. In some areas only a high level of vigilance and SOP (Standard operating procedure) is required to minimize mishaps. Currently, the iMRI gives the best means of determining extent of resection before concluding the surgery.