appropriate communication interventions can assist interdisciplinary professionals in their ability to support patients through their stroke journey.

## P.093

### Implementation of virtual interdisciplinary bedside rounds on an acute stroke unit

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**Background:** The novel corona virus pandemic presented the Saskatoon Stroke Program with challenges related to patient- and caregiver-centered communication. Keeping all parties informed of a patient's health status and plan of care in the setting of extreme visitation restrictions was difficult. Virtual interdisciplinary bedside rounds (VIDR) were introduced to enhance communication for stroke patients. **Methods:** A video conferencing application was adopted by the Saskatchewan Health Authority. Consent to participate was obtained by a social worker. Bedside nurses facilitated patient participation in VIDR on either a tablet or workstation on wheels, while caregivers were able to attend virtually. Each team member accessed the VIDR from an individual device to maintain social distancing. A structured questionnaire has been initiated to capture participant reported experiences and satisfaction with VIDR (data collection ongoing). **Results:** Most patients and caregivers were amiable to participate in VIDR. Challenges included: accessing appropriate technology for both family and staff members; rural and remote internet reliability; and maintaining a reasonable duration of rounds. There was overwhelming anecdotal positive feedback from participants. **Conclusions:** We implemented VIDR to enhance communication during the pandemic. Caregivers felt connected to the care team and up-to-date in the plan of care.

# Child Neurology (CACN)

# Epilepsy and EEG

## P.094

### Referral Practices for Epilepsy Surgery in Pediatric Patients: A North American Study

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**Background:** The International League Against Epilepsy recommends patients with drug resistant epilepsy (DRE) be referred for surgical evaluation, however prior literature suggests this is an underutilized intervention. This study captures practices of North American pediatric neurologists regarding the management of DRE and factors which may promote or limit referrals for epilepsy surgical evaluation. **Methods:** A REDCap survey distributed via the Child Neurology Society mailing list to pediatric neurologists practicing in North America. "R" was used to conduct data analyses. Ethics approval from the CHEO REB was granted prior to the start of data collection. **Results:** 102 pediatric neurologists responded, 77% of whom currently practice in the United States. 73% of respondents reported they would refer a patient for surgical consultation after two failed medications. Of all potential predictors tested in a logistic regression model, low referral volume was the only predictor of whether participants refer patients after more than three failed medications. **Conclusions:** Pediatric neurologists demonstrate fair knowledge of formal recommendations to refer patients for surgical evaluation after two failed medication trials. Other modifiable factors reported, especially family perceptions of epilepsy surgery, should be prioritized when developing tools to enhance effective referrals and increase utilization of epilepsy surgery in the management of pediatric DRE.

## P.095

### The many clinical facets of pediatric occipital spikes and the predictive value of consistent EEG dipole

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**Background:** Pediatric occipital epileptiform discharges (OEDS) occur in various clinical settings, including benign and symptomatic epilepsies. The study objective is to determine electro-clinical predictors for aetiology and prognosis in children with OEDs. **Methods:** 205 patients with OEDs were classified into seizure groups: symptomatic (n=98), idiopathic focal (IF) (n=57), idiopathic generalized (IG) (n=18), no-seizures (n=27) and febrile seizures (n=5). **Results:** The median age of seizure onset was 3 years (range: 0-19). There was more EEG background slowing ($P<0.05$) in the symptomatic; photosensitivity ($P<0.0001$) and GSW ($P<0.0001$) in IG; and presence of consistent EEG spike dipole in IF group. The symptomatic had more DD ($P< 0.0001$), autism ($P <0.019$), and school difficulties ($P<0.001$) than the IF and IG groups, but not different from the no-seizure group. **Conclusions:** OEDs with consistent dipole spike is predictive of IF epilepsy. In contrast to frontal and temporal lobe epilepsy, only 30% with symptomatic epilepsy had occipital-predominant neuro-imaging abnormalities. Notably, neuro-psychiatric co-morbidities were similar between the symptomatic and no-seizure group.

## P.096

### Optimizing the Use of Continuous EEG Monitoring in Neonatal Encephalopathy

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**Background:** Newborns with hypoxic-ischemic encephalopathy (HIE) are at high risk for seizures, the majority of which

have no clinical signs and therefore require continuous electroencephalographic (cEEG) monitoring for their detection. We sought to determine which neonates are at highest risk for seizures in order to optimize allocation of scarce cEEG resources. **Methods:** We identified term neonates diagnosed with HIE who underwent at least 24 hours of protocol-based cEEG monitoring between 2016 and 2019. We quantified seizure incidence, timing and burden, and correlated these with potential risk factors such as HIE severity, use of therapeutic hypothermia, preceding suspected clinical seizures, amplitude-integrated EEG (aEEG) background and patterns suspicious for seizures, and use of anti-seizure drugs. **Results:** cEEG monitoring was completed in 218 neonates with HIE, of whom 164 (75%) underwent therapeutic hypothermia. Preceding clinical/aEEG seizures occurred in 147 (67%), 99 (67%) of whom had been cooled but only 22 (10%) had cEEG-confirmed seizures. Characterization of seizure burden and correlation with potential risk factors is ongoing. **Conclusions:** Although seizures are commonly suspected in neonates with HIE, they are infrequently confirmed during cEEG monitoring, creating opportunities for more efficient risk-based allocation of cEEG resources.

## P.097

### Adrenal Insufficiency among Children treated with Hormonal Therapy for Infantile Spasms

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**Background:** Hormonal therapy is a standard treatment for infantile spasms. The high doses given and long treatment duration expose patients to the risk of adrenal insufficiency (AI). This study aims to quantify the incidence of AI among children with infantile spasms treated with corticosteroids and/or adrenocorticotropic hormone (ACTH). **Methods:** A retrospective chart review of patients treated for infantile spasms was performed between January 2009 to March 2020 in one pediatric specialized hospital. Variables collected included patient and treatment characteristics, risk factors of AI and adrenal function testing. Analysis included descriptive statistics. **Results:** Thirty-one patients met the inclusion criteria and received a total of 33 separated courses of treatment. Adrenal function following each course of treatment was evaluated in all patients. AI occurred in 25/33 (76% [95CI 58-89]) children. There was no predictive factor of AI. No drug regimen was deemed safe. The two patients (6%) with an acute adrenal crisis were the youngest of the cohort. **Conclusions:** Adrenal suppression is frequent and can lead to adrenal crisis after standard hormonal therapy for infantile spasms. A routine laboratory assessment of adrenal function should be done for all patients. Hydrocortisone replacement therapy should be given until testing results are obtained, particularly for younger infants.

## P.098

### The Epilepsy Surgery Experience in Children with Infantile Spasms at the Hospital for Sick Children

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**Background:** Infantile spasms (IS) is an epileptic encephalopathy, characterized by epileptic spasms, hypsarrhythmia, and developmental regression. This is a retrospective case series detailing the experience in children with IS who have undergone epilepsy surgery at The Hospital for Sick Children (HSC). **Methods:** Records of 223 patients from HSC were reviewed. Patients were included if they had a current or previous history of IS with a lesion detected on MRI/PET scan who underwent epilepsy surgery. **Results:** Nineteen patients were included. The etiology of IS was encephalomalacia in six patients (32%), malformations of cortical development in 11 patients (58%), atypical hypoglycaemic injury in one patient (0.5%), and partial hemimegalencephaly in one patient (0.5%). The median age at the onset of IS was five months. The median age at surgery was 18 months. Nine patients (47%) underwent hemispherectomy and 10 patients (53%) underwent lobectomy/lesionectomy. Fifteen patients (79%) were considered ILAE Seizure Outcome Class 1. Developmental outcome was improved in 14/19 (74%) and stable in 5/19 (26%) patients. **Conclusions:** Even with a generalized EEG pattern such as hypsarrhythmia, patients should be considered for focal resective surgery. Early surgical intervention shortens the duration of active epilepsy thus limiting the potentially irreversible effects of on-going seizures.

## P.099

### Generator replacement with cardiac based VNS device in children with drug-resistant epilepsy

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**Background:** We aimed to study the proportion of patients with DRE and pre-existing VNS device, who show improvement of at least one class in McHugh seizure outcome classification at last follow up after generator replacement with cardiac based VNS device. **Methods:** We retrospectively reviewed children with DRE with the older VNS model (102) who underwent battery replacement with the AspireSR®, model 106 since September 2016 at our institution. We assessed the seizure