

Sciences Federation (CNSF) and Canadian Epilepsy nursing Group (CENG), to complete our online questionnaire. Results: Preliminary data show 43% were between 32–40 years of age and 76% were medical doctors. Sixty-three percent had been in practice for less than 20 years; 81% considered themselves epilepsy specialists and 66% devoted their practice entirely to epilepsy patients and 78% practiced exclusively in academic centers. Conclusions: Our data shows providers involved in the care of women with epilepsy in Canada are predominantly academic experts in epilepsy. Potential gaps in care include mid-late career physicians, non-specialized health care practitioners, and community-based practices, as less likely to provide care for WWE. This snapshot may provide future insights to the unmet needs of WWE Canada.

P.010

Extreme delta brush in anti-NMDAR encephalitis correlates with poor functional outcome and death

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Background: The electroencephalography (EEG) pattern extreme delta brush (EDB) is felt to be highly specific for anti-N-methyl-D-aspartate receptor (NMDAR) encephalitis. This study aimed to characterize EEG findings in anti-NMDAR encephalitis patients looking for the proportion of abnormal EEGs, presence of EDB, and to relate EDB to clinical outcomes (Glasgow Outcomes Scale (GOS) at 6 months, need for ICU admission, and death). **Methods:** This retrospective single centre study included anti-NMDAR encephalitis patients who had ≥ 1 EEGs obtained from 2014–2021. EEGs were retrospectively analyzed by 2 reviewers. Clinical outcomes of interest were extracted through hospital and clinic chart review. **Results:** Twenty-one patients with anti-NMDAR encephalitis were included. Sixty-four EEGs were analyzed. Four EEGs (6.3%) were within normal limits. Focal or generalized slowing (without EDB) was seen on 44 EEGs (68.8%). EDB was seen on 16 EEGs (25.0%) in 9 of 21 patients. The presence of EDB was significantly associated with need for ICU admission ($p=0.02$), poorer outcome at 6 months as per the GOS ($p=0.002$), and with death ($p=0.02$). **Conclusions:** The presence of EDB on EEG in anti-NMDAR encephalitis patients is associated with increased need for ICU admission, risk of death, and worse functional outcomes at 6 months.

P.011

Piano Player Hand Sign: description of a novel clinical sign elicited by cortical electrical stimulation in epileptic patients

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Background: Cortical electrical stimulation (CES) may produce different motor responses according to the brain area stimulated. In this study, we describe a new motor response characterized by finger movements such as a person playing piano, which we named the Piano Player Hand (PPH) sign. **Methods:** We retrospectively reviewed the CES results of 252 patients with drug-resistant epilepsy who underwent

SEEG between January 2005 and December 2019 at the Grenoble-Alpes University Hospital. The patients' characteristics, SEEG findings and CES parameters were extracted to find common clinical and anatomical features. **Results:** The PPH sign was identified 20 times from 12 patients, with stimulation of either the supplementary motor area (SMA), anterior cingulate gyrus (ACG), pre-SMA, middle frontal gyrus and anterior insula. It was obtained with high frequency stimulation, with intensity ranging from 0.7 to 3mA and mostly contralateral to the stimulation side (19/20). It was part of the ictal semiology of five patients. An afterdischarge was observed in five of the relevant CES. **Conclusions:** The PPH sign is a novel clinical sign, obtained mainly, but not exclusively, with CES of a small vicinity encompassing the SMA, pre-SMA and ACG. The PPH sign, when occurring ictally, may point to the premotor mesial frontal surface of the brain.

P.012

The new-onset refractory status epilepticus (NORSE/FIRES) family registry

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Background: New-onset refractory status epilepticus (NORSE) is a rare clinical presentation affecting previously healthy individuals. Febrile infection-related epilepsy syndrome (FIRES) is a subcategory of NORSE and applies when a preceding fever occurs. The NORSE/FIRES Family Registry has been developed to gain insight into risk factors and to assess the spectrum of clinical outcomes amongst survivors. **Methods:** Survivors, surrogates, and physicians can enter patient data into the REDCap-based registry: <https://www.norseinstitute.org/norse-registry-2>. Information collected includes medical history, clinical presentation, and quality of life, among others. Participants are invited to complete follow-up surveys for up to two years following presentation of seizures. Enrollment is ongoing in multiple languages. **Results:** 56 participants are enrolled from 12 countries (2–78 years, median: 12.5, IQR: 20.5, 31 survivors). At ≥ 6 months after onset, survivors experience a mean of ≥ 12 seizures per month and remain on a median of 4 (IQR: 3) anti-seizure medications. The median quality of life amongst all survivors was rated 4/10 (IQR: 3.5). **Conclusions:** Preliminary data suggests that survivors of NORSE/FIRES have a high seizure burden and poor quality of life. This international multi-lingual family registry will help develop hypotheses for future studies and provides an opportunity for families to contribute to the scientific understanding of this disease.

P.013

Stereo-encephalographic presurgical evaluation of temporal lobe epilepsy

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Background: Drug resistant epilepsy is present in nearly 30% of patients. Resection of the epileptogenic zone has been found to

be the most effective in achieving seizure freedom. The study of temporal lobe epilepsy for surgical treatment is extensive and complex. It involves a multidisciplinary team in decision-making with initial non-invasive studies (Phase I), providing 70% of required information to elaborate a hypothesis and treatment plans. Select cases present more complexity involving bilateral clinical or electrographic manifestations, have contradicting information or may involve deeper structures as a part of the epileptogenic zone. Methods: A review of the literature was done with key terms such as: “temporal lobe epilepsy” and “SEEG” and “intracranial EEG”, “epilepsy surgery”, un Pubmed, EMBASE, Medlink and Scielo. Most cutting edge, controversial subjects surrounding this field were considered. Results: In this comprehensive review, we explore the indications, usefulness, discoveries in interictal and ictal findings, pitfalls, and advances in the science of presurgical stereo-encephalography for temporal lobe epilepsy. Conclusions: Intracranial recording follows original concepts since its development by Bancaud and Talairach, but great advances have been made in the field. Stereo-electroencephalography is a growing field of study, treatment and establishment of seizure pattern complexities.

P.014

Immunotherapy responses of patients with suspected autoimmune-associated epilepsy with negative neural antibody testing

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Background: In refractory epilepsy patients with possible autoimmune-associated epilepsy (AAE) but negative antibody testing (-AB), immunotherapy trials (IMT) may still be pursued. The value of (IMT) in such patients remains unclear. For this reason, we reviewed their immunotherapy responses. Methods: Retrospective review of epilepsy patients admitted to the Epilepsy Unit between (2018-2021) who received (IMT). All had (-AB) and received immunotherapy (methylprednisolone (IVMP)-immune globulin (IVIg)-plasma exchange (PLEX)-rituximab). We considered responders when their seizure reduction was $\geq 50\%$. Results: 14 patients identified. Of them, 50% (n=7) females. Median age (43.5 year. IQR= 28.75-63.25). All refractory to ≥ 2 anti-seizure medications (ASM). Median epilepsy onset was (39.5 years. IQR=23.75-60.25). Median time from diagnosis until received immunotherapy was (15.5 months. IQR=12.75 -21.75). Patients received either IVIG+IVMP (35.7%, n=5) or IVIG alone (28.5%, n=4) or IVIG+IVMP+PLEX (21.4%, n=3) or IVMP alone (7.1%, n=1) or IVIG+IVMP+rituximab (7.1%, n=1). Median follow-up was 25 months. Although early immunotherapy responses were common, sustained response to immunotherapy at last follow-up was only in 21.4% (n=3). Factors confounding determination of immunotherapy efficacy were present in all responders (e.g: concurrent changes in ASM). Conclusions: Our findings suggest that (IMT) in patients with suspected (AAE) but with (-AB) are largely unsuccessful. This suggests an insufficient therapeutic effect after (IMT) or alternatively, non-immune-mediated

mechanisms causing this type of epilepsy. Critical evaluations of (IMT) in such cases are needed.

HEADACHE

P.015

Monthly migraine days, acute medication use-days, and migraine-specific quality of life in responders to atogepant: a post hoc analysis

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Background: In phase 3 ADVANCE, atogepant 60mg reduced mean monthly migraine days (MMDs) from 7.8 days (baseline) to 3.0 (weeks 9-12; $\Delta=-4.7$) in the overall episodic migraine population [treatment responders and nonresponders (i.e., marked benefit and minimal benefit)], which obscures information regarding magnitude of treatment effect in these populations. Here, magnitude of treatment effect in atogepant responders and nonresponders is characterized. Methods: Mean MMDs, acute medication use-days (MUDs), and Migraine-Specific Quality of Life-Role Function-Restrictive (MSQ-RFR) scores were calculated in treatment responders (based on MMD percentage reduction) and nonresponders from ADVANCE participants. Results: From baseline to weeks 9-12, $\geq 50\%$ improvement was achieved by 71% (139/195) of participants. In these responders, MMDs reduced from 7.6 to 1.3 ($\Delta=-6.3$). 50% (97/195) of participants achieved $\geq 75\%$ response. In this group, MMDs reduced from 7.7 to 0.6 ($\Delta=-7.1$). Atogepant 60mg nonresponders (<25% reduction in MMDs; 15% [30/195 participants]) showed MMD change from 7.7 to 9.1 ($\Delta=+1.4$). Acute MUDs in $\geq 50\%$ MMD responders decreased 7.1 to 1.6 ($\Delta=-5.5$). In treatment-nonresponders, acute MUDs were 7.3 (baseline) and 7.2 (weeks 9-12; $\Delta=-0.1$). Similar mean MSQ-RFR score changes were observed in both populations. Conclusions: Of participants who experienced $\geq 50\%$ reduction in MMDs, 71% had substantial treatment effect ($\Delta\text{MMD}=-6.3$), representing 83% reduction in MMDs.

P.016

Reduction in migraine-associated burden over 24 weeks of treatment with eptinezumab in patients with chronic migraine

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Background: To examine changes in the occurrence, severity, and symptoms of headache episodes in patients with chronic