

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”, on 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

migraine (CM) following eptinezumab treatment. Methods: PROMISE-2 (NCT02974153) was a double-blind, placebo-controlled, parallel-group trial that randomized adults with CM to eptinezumab 100 mg, 300 mg, or placebo IV every 12 weeks for up to 24 weeks (2 infusions). Headache episodes (migraine and non-migraine) and their characteristics were reported in daily electronic diaries during the 28-day baseline period and throughout the 24-week treatment period. Results: A total of 1072 patients were included. Patients reported a mean of 20.4–20.6 monthly headache days during baseline across treatment groups. Mean monthly headache days decreased by 8.9 (100 mg) and 9.7 (300 mg) with eptinezumab versus 7.3 with placebo over weeks 1–24. Mean monthly headache episodes also decreased by 8.4 (100 mg) and 9.0 (300 mg) compared to 7.1 with placebo over weeks 1–24. Among headaches occurring post-treatment, decreases in severe pain, nausea, phonophobia, photophobia, and physical activity limitations were numerically greater than placebo. Conclusions: In patients with CM, eptinezumab numerically decreased the frequency and severity of monthly headache days and episodes more than placebo. Patients treated with eptinezumab reported a decrease in burdensome symptoms of headache episodes.

P.017

Optimization of acute treatment and headache-related impact following eptinezumab initiated during a migraine attack: post hoc analysis of the RELIEF study

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Background: Patients administered eptinezumab during an active migraine had larger numerical improvement in the 6-item Migraine Treatment Optimization Questionnaire (mTOQ-6) total score compared to placebo. The mTOQ-6 was used to determine success of acute treatment. Methods: RELIEF (NCT04152083) was a double-blind trial that randomized adults eligible for preventive migraine treatment to eptinezumab 100mg or placebo, administered intravenously within 1–6 hours of migraine onset. mTOQ-6 was captured at baseline and Week 4 and rescored into mTOQ-4. Patients were grouped by baseline mTOQ-4 total scores. Results: 226 eptinezumab-treated and 232 placebo patients were included. The percentage of patients in the combined very poor and poor optimization subgroups at baseline with eptinezumab (n=155; 68.6%) versus placebo (n=138; 59.5%) decreased by 26.6 percentage points (n=95; 42.0%) and 9.9 percentage points (n=115; 49.6%), respectively, at Week 4. Of the 155 eptinezumab-treated and 138 placebo patients who were very poorly/poorly optimized at baseline, 73 (47.1%) versus 35 (25.4%) were moderately/maximally optimized at Week 4, respectively. Greater improvements in mTOQ-6 scores were noted in patients more poorly optimized at baseline than those more optimized. Conclusions: Eptinezumab showed greater acute migraine medication optimization and decreased headache-related impact compared to placebo, suggesting that eptinezumab may work synergistically with acute medications.

P.018

Treatment patterns and healthcare resource utilization for patients with migraine in Alberta

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Background: As the second leading cause of years lived with disability in the world, and the first in people under 50, migraine represents a major burden to healthcare systems. This study examined treatment patterns and healthcare resource utilization (HRU) in patients with migraine using real-world data from Alberta. Methods: This was a retrospective cohort study of patients with ≥ 1 ICD-9-CM/ICD-10-CA code for migraine or ≥ 1 prescription for a triptan from April 1st, 2012 to March 31st, 2018. Descriptive statistics were used to characterize the study outcomes. Results: The incidence of migraine exceeded 1,000 cases per 100,000 person-years over the study period. The mean age of the cohort (n=199,931) was 40.0, and 72.3% were women. Migraine-related HRU accounted for 3%–10% of all HRU across endpoints (e.g., ED visits, hospitalization, physician visits). One-third of the cohort were prescribed acute medications (non-steroidal anti-inflammatories, triptans or other (including opioids)), whereas fewer than one-fifth were prescribed at least one migraine preventive such as tricyclic anti-depressants (proportion: 15%), anti-convulsants (13%), beta-blockers (7%), or neurotoxins (4%). Conclusions: The low medication prescription rates and high HRU indicates the potential unmet need and high disability in patients with migraine. The impact of migraine treatment patterns on HRU is an avenue for future research.

P.019

Interictal burden of migraine: correlations with other measures of migraine burden and effects of galcanezumab migraine-preventive treatment

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Background: Typical migraine clinical trial endpoints assess only ictal burden. Methods: Adults (N=462) with episodic or chronic migraine with previous failure of 2–4 preventive medication categories were randomized 1:1 to 3-month double-blind treatment with placebo or galcanezumab 120mg. Primary endpoint was mean change from baseline in monthly migraine headache days. Migraine Interictal Burden Scale-4 (MIBS-4) measured migraine-related burden on non-headache days for past 4 weeks (0=no burden, 1–2=mild, 3–4=moderate, 5–12=severe). Migraine Disability Assessment (MIDAS), Migraine-Specific Quality of Life Questionnaire (MSQ), Patient Global Impression-Severity (PGI-S), depression (Patient Health Questionnaire-9 [PHQ-9]), and anxiety (Generalized Anxiety Disorder Scale [GAD-7]) were assessed. Relationships among measures were assessed at baseline using Spearman's rank correlation coefficient. Results: MIBS-4 was moderately correlated with