Methods: We performed ultra-deep sequencing of 13 mTOR pathway genes using a custom HaloPlex^{HS} target enrichment kit (Agilent Technologies) in 16 resected histologically-confirmed FCD specimens. **Results:** We identified causal variants in 62.5% (10/16) of patients at an alternate allele frequency of 0.75–33.7%. The spatial mutation frequency correlated with the FCD lesion's size and severity. **Conclusions:** Screening FCD tissue using a custom panel results in a high yield, and should be considered clinically given the important potential implications regarding surgical resection, medical management and genetic counselling.

P.049

Quality of life in children with absence epilepsy

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Background: Childhood absence epilepsy is a common generalized epilepsy in pediatric patients. Although this was considered a "benign" syndrome, new data suggests there are associated neurocognitive effects. This is the first study comparing quality of life and social functioning in those with absence epilepsy to those with other types of epilepsy. **Methods:** This observational study recruited patients from six Canadian academic centers. 106 patients had absence seizures, and 219 had other seizures. Established measures of depression, anxiety, social skills, social support, participation, quality of life, and epilepsy severity were assessed. MANCOVA was used to evaluate differences in social function, quality of life, and epilepsy severity measures, while accounting for age and gender. **Results:** This yielded a statistically significant result (Wilk's lambda <0.05), with partial eta squared of 0.163. Follow up of between subjects tests revealed lower health related quality of life interpersonal/ social subscale and close friend social support scores in those with absence epilepsy, while other measures were not significant. **Conclusions:** Children with absence epilepsy have similar social function, quality of life and epilepsy severity measures compared to those with other types of epilepsy. This indicates that any dysfunction in these domains is similar to those with other types of epilepsy.

P.050

Epilepsy phenotypes in patients with Sotos syndrome

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Background: Sotos syndrome is a genetic condition caused by *NSD1* alterations, characterized by overgrowth, macrocephaly, dysmorphic features, and learning disability. Approximately half of children with Sotos syndrome develop seizures. We investigated the spectrum of seizure phenotypes in these patients. **Methods:** Patients were recruited from clinics and referral from support groups. Those with clinical or genetic diagnosis of Sotos syndrome and seizures were included. Phenotyping data was collected via structured clinical interview and medical chart review. **Results:** 25 patients with typical Sotos syndrome features were included. Of 14 tested patients, 64% (n=9) had *NSD1* alterations. Most had developmental impairment (80%, n=20) and neuropsychiatric comorbidities (68%, n=17). Seizure onset was variable (2 months to 12 years). Febrile and absence seizures were the most frequent types (64%, n=16). Afebrile generalized tonic-clonic (40%, n=10) and atonic (24%, n=6) seizures followed. Most patients (60%, n=15) had multiple seizure types. The majority (72%, n=18) was controlled on a single antiepileptic, or none; 4% (n=1) remained refractory to antiepileptics. **Conclusions:** The seizure phenotype in Sotos syndrome most commonly involves febrile convulsions or absence seizures. Afebrile tonic-clonic or atonic seizures may also occur. Seizures are typically well-controlled with antiepileptics. The rate of developmental impairment and neuropsychiatric comorbidities is high.

Headache

P.051

Early life stress in adolescent migraine and the mediational influence of internalizing psychopathology in a Canadian cohort

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Background: This study sought to examine the association between early life stressors and adolescent headache and the potential mediating influence of internalizing psychopathology. **Methods:** This study used data from 2,313 respondents of the National Longitudinal Survey of Children and Youth, followed prospectively from age 0-1 years at baseline (1994/1995) until age 14-15 years (2008/2009). The relationships between four measures of early life family level stressors, and outcomes of incident health professional diagnosed migraine and self-reported, unclassified frequent headache (>1 per week) were examined using multivariable logistic regression. Mediation analyses of the indirect effect of internalizing psychopathology (i.e., depression and anxiety symptoms) were examined using a regression-based path analytical framework. **Results:** There were 81 adolescents with incident migraine and 231 with frequent headache. There were no direct associations between early life family level factors and adolescent headache ($p > .05$). Internalizing psychopathology mediated relationships between family dysfunction (indirect effect [IE] 0.0181, 95% bias-corrected confidence interval [CI_{BC}] 0.0001-0.0570), punitive parenting (IE 0.0241, 95% CI_{BC} 0.0015-0.0633), parental depressive symptomatology (IE 0.0416, 95% CI_{BC} 0.0017-0.0861), and incident migraine, but not frequent headache. **Conclusions:** Findings provide support for the influence of early life family level factors on prospective risk of developing migraine through internalizing psychopathology.