group (GR: kainate and then placebo); G1 groups were treated from the third day (G1m, G1c: kainate and then Mg/Ca); G2 groups were treated from the third week (G2m, G2c: kainate and then Mg/Ca). Radial maze and a classic maze were used for cognition evaluation. Results: The memory (short/long term) was differently affected by kainate or improved by Mg/Ca. The treated groups performed better than GR mice, but Mg was more effective. In addition, Mg demonstrated an increasing therapeutic effect over time while Ca showed an acute and apparently decreasing action in the G1c group. Conclusions: Mg should be considered for a clinical evaluation of its effect on epileptic disorders.

# CHILD NEUROLOGY (CACN) EPILEPSY AND EEG

### P.042

# Safety and efficacy of stereoelectroencephalography in pediatric epilepsy surgery

CA Elliott (Edmonton)\* K Narvacan (Edmonton) J Kassiri (Edmonton) S Carline (Edmonton) B Wheatley (Edmonton) D Sinclair (Edmonton)

doi: 10.1017/cjn.2019.142

Background: There are few published reports on the safety and efficacy of stereoelectroencephalography (SEEG) in the presurgical evaluation of pediatric drug-resistant epilepsy. Our objective was to describe institutional experience with pediatric SEEG in terms of (1) insertional complications, (2) identification of the epileptogenic zone and (3) seizure outcome following SEEG-tailored resections. Methods: Retrospective review of 29 patients pediatric drug resistant epilepsy patients who underwent presurgical SEEG between 2005 - 2018. **Results:** 29 pediatric SEEG patients (15 male;  $12.4 \pm$ 4.6 years old) were included in this study with mean follow-up of 6.0 ± 4.1 years. SEEG-related complications occurred in 1/29 (3%) neurogenic pulmonary edema. A total of 190 multi-contact electrodes (mean of  $7.0 \pm 2.5$ per patient) were implanted across 30 insertions which captured 437 electrographic seizures (mean  $17.5 \pm 27.6$  per patient). The most common rationale for SEEG was normal MRI with surface EEG that failed to identify the EZ (16/29; 55%). SEEGtailored resections were performed in 24/29 (83%). Engel I outcome was achieved following resections in 19/24 cases (79%) with 5.9  $\pm$ 4.0 years of post-operative follow-up. Conclusions: Stereoelectroencephalography in presurgical evaluation of pediatric drug-resistant epilepsy is a safe and effective way to identify the epileptogenic zone permitting SEEG-tailored resection.

### P.043

## Cannabis treatment in children with epilepsy: practices and attitudes of neurologists in Canada

SM DeGasperis (Ottawa)\* R Webster (Ottawa) D Pohl (Ottawa) doi: 10.1017/cjn.2019.143

Background: Cannabis has been shown to be an effective therapy for epilepsy in children with Dravet and Lennox-Gastaut syndrome. Despite the fact that many pediatric epilepsy patients across Canada are currently being treated with cannabis, little is known about pediatric neurologists' attitudes towards it. Methods: A 26-item online survey was distributed to 148 pediatric neurologists across Canada. Results: 56/148 neurologists responded and reported that over 600 children with epilepsy are currently taking cannabinoids. 34% of neurologists authorized cannabis to children, 38% referred children for authorization, and 29% did not authorize or refer their patients. Of those neurologists who referred, 76% referred to a community-based non-neurologist. The majority of physicians authorized cannabis to patients with Dravet syndrome (68%) and Lennox-Gastaut syndrome (64%). Cannabis was never authorized as a first-line treatment. 54% of neurologists stated that their patients were taking CBD alone, despite this option not being available in Canada. All physicians reported having at least one hesitation regarding cannabis, the most common ones being poor evidence (66%), poor quality control (52%), and cost (50%). Conclusions: The majority of Canadian pediatric neurologists use cannabis as a treatment for epilepsy in children. However, there appear to be knowledge gaps and hesitations.

#### P.044

### Quality of life in children with epilepsy treated with the low glycemic index diet – a pilot study

S Boles (Ottawa)\* R Webster (Ottawa) S Parnel (Ottawa) J Murray (Ottawa) S Ieradi (Ottawa) E Sell (Ottawa) D Pohl (Ottawa)

doi: 10.1017/cjn.2019.144

Background: The classic ketogenic diet is the main non-pharmacological treatment for refractory epilepsy; however, adherence is often challenging. The low glycemic index diet (LGID) is less strict, almost equally effective, and associated with improved adherence. Little is known about the quality of life of children treated with LGID. The objective of this study was to explore changes in the quality of life of children with epilepsy transitioning to the LGID. Methods: Patients on LGID and their parents filled out Pediatric Quality of Life Epilepsy Module questionnaires; one while being on the LGID, and one retrospectively for the time prior to starting the LGID. Results: Data was collected from five children ages 3-13 and their parents. Complete seizure control was seen in two children, >50% seizure reduction in one, and no change in two children. Parental reported quality of life while on the LGID increased with two participants but decreased in all child self reports. Conclusions: Although the LGID led to improved seizure control in three out of five patients, the childreported quality of life decreased in all children. Larger prospective studies are warranted to reliably assess the impact of the LGID on the quality of life in children with epilepsy.