

to 3/week. Seizures last only 2-3 seconds, without postictal confusion leading to improvements in neuropsychological function. AED dosages are not reduced. *Conclusions:* Successful intracranial EEG localization of otherwise non-lesional non-resectable seizure focus permits the use of deep brain stimulation that effectively reduces refractory seizure frequency.

## P.027

### Investigation of hippocampal sub-structures in HS and non-HS focal temporal lobe epilepsy at 7T

BG Santyr (London)\* M Goubran (London) J Lau (London) B Kwan (London) SM Mirsattari (London) JG Burneo (London) S de Ribaupierre (London) RR Hammond (London) TM Peters (London) AR Khan (London)

doi: 10.1017/cjn.2016.132

*Background:* The clinical identification of hippocampal sclerosis (HS) is important in predicting surgical outcomes in patients with temporal lobe epilepsy (TLE). In cases where gross hippocampal sclerosis is not identifiable clinically, a more detailed analysis of hippocampal subfields using ultra-high-field magnetic resonance imaging (MRI) may reveal areas of abnormality, which was the focus of our study. *Methods:* Patients (N=13) with drug-resistant TLE (9 no-HS, 4 HS) and 20 age-matched healthy controls were scanned and compared using a 7T MRI protocol. Using a manual segmentation scheme to delineate hippocampal subfields, subfield-specific volume changes were studied between the two groups. In addition, radiological patient assessment at 7T was correlated with measured subfield changes. *Results:* Volumetry of the hippocampus at 7T in HS patients revealed significant ipsilateral subfield losses in CA1 and CA4DG. Volumetry also uncovered subfield volume losses in 33% of no-HS patients, which had not been detected conventionally. Furthermore, 89% of no-HS patients showed abnormality (internal architecture or size) at 7T, identified by radiologists blinded to the patient's initial classification. *Conclusions:* These preliminary findings indicate that hippocampal subfield volumetry assessed at 7T may be superior to conventional visual inspection by a neuroradiologist in the identification of hippocampal pathologies in TLE.

## P.028

### Incidence and management of seizures and epilepsy after ischemic stroke: a systematic review

MV Vyas (Toronto)\* J Wang (Toronto) BA Davidson (Toronto) G Saposnik (Toronto) JG Burneo (London)

doi: 10.1017/cjn.2016.133

*Background:* Seizures and epilepsy are well-recognized complications after stroke. However, the reported incidence varies and so does their management. *Methods:* We conducted a systematic review and sought observational studies that reported incidence of seizures and/or epilepsy following arterial ischemic stroke in adults, and those that reported the management of epilepsy, specifically the use of EEG to determine the diagnosis, timing of initiation of anti-epileptic drug (AED), and the treatment response to AEDs. We systematically searched in Medline including Pre-Medline and EMBASE databases from their inception to October 1, 2015. First the titles and then the articles were reviewed and rated by two independent reviewers, and

disagreements were resolved by consultation with a third reviewer. A pre-set data abstraction form was used for extracting the information of interest. *Results:* A total of 11,815 titles were found from the initial search strategy across all databases following de-duplication. Of these 130 studies are included for full text review. The adjudication process is underway and the reviewers are sifting through these studies to select the studies that will be included in the final review. *Conclusions:* Understanding incidence and management of post-stroke epilepsy is important to improve the quality of life of stroke survivors.

## GENERAL NEUROLOGY

## P.029

### Case report: Facial diplegia and aseptic meningitis in a 44 year-old man returning from Côte d'Ivoire

HA AIDhukair (Montreal)\* R Altman (Montreal) A Parks (Montreal) MP Cheng (Montreal) A Damian (Montreal)

doi: 10.1017/cjn.2016.134

*Background:* Bilateral facial paralysis is a rare manifestation of Human Immunodeficiency Virus (HIV). Few cases of HIV seroconversion syndrome presenting with aseptic meningitis and facial diplegia have been previously reported. *Methods:* Case Report. *Case Description:* A 44-year-old male with uncontrolled hypertension who presented with 5-day history of migrainous headache, buccolabial dysarthria, meningismus and dysgnesia. Three weeks prior to presentation, he suffered a transient febrile illness preceded by an unprotected sexual encounter while vacationing in Côte d'Ivoire. Examination was significant for hypertensive urgency, bilateral lower motor neuron (LMN) facial paralysis, and meningeal irritation. Investigations revealed acute on chronic renal impairment and left ventricular hypertrophy. Brain MRI (without contrast) revealed microhemorrhages with dystrophic calcifications and microangiopathic changes. CSF analysis revealed 55 WBC (lymphocytic), normal glucose, and 0.67g/L protein. The infectious work-up was positive for HIV, which was confirmed by Western Blot (WB). CD4 count was 176 cells/ $\mu$ L and the viral load was 419,289 copies/ml. Lyme antibodies were also positive by enzyme-linked immunosorbent assay (ELISA), but negative by WB. *Discussion:* Facial diplegia is a rare manifestation of HIV, and can be indicative of a seroconversion syndrome. This case illustrates another layer of complexity; deciphering acute from chronic systemic manifestations of hypertension, and appreciating falsely positive Lyme antibodies by ELISA during acute HIV seroconversion.

## P.031

### Lemierre's syndrome - a rare disease with devastating complications

S Alhusaini (Montreal)\* S Althubait (Montreal) C Melmed (Montreal) M Sidel (Montreal)

doi: 10.1017/cjn.2016.135

*Background:* Lemierre's syndrome is a rare but serious complication of bacterial oropharyngeal infection. It is characterized by