

it was noted whether patients were taking anticholinergic or potentially sedating drugs. Statistical analysis (Spearman's Correlation) was conducted to examine trends in medication use over time. *Results:* Ninety-one patients (20.5%) were taking at least one anticholinergic medication. There was a statistically significant decline (25.0% in 2004 to 12.5% in 2014) in percentage of patients presenting with anticholinergic medications over the eleven years of this study (Spearman's correlation coefficient = -0.64, p=0.035). *Conclusions:* The most encouraging statistic to come from this study is a decline in anticholinergic medication use in this rural population. Prescribers must be properly informed to ensure that the number of medications per patient does not continue to rise, that medications are used only as necessary, and that potentially deleterious medications are avoided.

## EPILEPSY/EEG

### P.020

#### Septo-optic dysplasia plus manifesting with medically refractory epilepsy

MO Al.Khateeb (London)\* S Mirsattari (London)\* D Diosy (London) R McLachlan (London)

doi: 10.1017/cjn.2016.126

*Background:* Septo-Optic Dysplasia is a rare disorder with developmental malformations that was first reported by De Morsier. SOD associated with refractory epilepsy has not been well studied. We report six cases with SOD in patients with malformation of cortical development(MCD) and medically refractory epilepsy that underwent video-EEG telemetry. *Methods:* Six cases of SOD plus were admitted to the Epilepsy Monitoring Unit at London Health Sciences Centre because of medically refractory epilepsy. Functional hemispherectomy in one patient resulted in significant reduction of her seizures while insertion of a vagus nerve stimulator was not successful in controlling seizures in another patient. Right temporal resection for one patient resulted in about 60% reduction in her seizures. The remaining three patients were not surgical candidates and they remained on antiepileptic drugs. *Results:* MCD was present in 4/6 patients. Bilateral optic nerve hypoplasia was found in 50% of the patients. EEG was abnormal in all cases(6/6). Intractable epilepsy was found in 6/6 patients. *Conclusions:* SOD plus was associated with medically refractory epilepsy.

Case	Brain MRI	Hypothalamic-pituitary axis MRI	EEG	Surgery	Seizure Outcome
1	Schizencephaly in bilateral frontal lobe absent septum pellucidum, pachygyria.	Normal	Multi-focal	No	
2	Bilateral perisylvian cortical dysplasia and polymicrogyria, absent septum pellucidum.	Normal	Multi-focal	VNS	Class 5 ILAE Less than 50 Reduction of baseline seizu days

3	Absent septum pellucidum, hypoplasia of chiasm and bi-optic nerve, right frontal cortical dysplasia, agenesis of corpus callosum.	Normal	Right hemisphere	Right functional hemispherectomy 2000	Class 3 ILAE One to three seizure days p year; with or without auras
4	Schizencephaly, absent septum pellucidum, cortical dysplasia, hypoplasia of chiasm, optic nerve and pituitary gland.	Hypoplastic anterior pituitary	Right temporal	right temporal neocortical resection in 2006	Class 4 ILAE Four seizure days year to 50% reduct of baseline seizu days; with or without auras
5	Absent septum pellucidum, hypoplasia of chiasm and optic nerve,, agenesis of corpus callosum, heterotopia.	Normal	Multi-focal	No	
6	Absent septum pellucidum, hypoplasia of chiasm and bi-optic nerve, pituitary gland, agenesis of corpus callosum.	Hypoplastic anterior pituitary	Multi-focal	No	

### P.021

#### Seizures among drivers in Newfoundland and Labrador

KS Aminian (St. John's)\* A Ogunyemi (St. John's)\* J Coombs (St. John's)

doi: 10.1017/cjn.2016.127

*Background:* Regulation of drivers licences aims to strike a balance between autonomy and public safety. In Newfoundland and Labrador, an individual experiencing seizures must have a 6-month seizure-free interval before a driving licence is reinstated, although exceptions apply. There is a paucity of data surrounding driving safety in people with epilepsy. *Methods:* The Department of Motor Vehicles and Registration extracted data from the charts of drivers experiencing seizures for the period between 2010-2014, inclusive. Two groups were examined: drivers aged 16-24 (n=104) and 75+ (n=115). Given that mandatory reporting is required in Newfoundland and Labrador, this theoretically represents a population-based study. *Results:* Overall, 5.1% of the population experienced a motor vehicle collision, and collisions were more frequent among younger drivers. Significantly more people in the 75+ category had a medical history that could have contributed to seizures. Only 37.6% of the overall sample had their first seizure reported. This was not different between age groups or seizure types (generalized vs. focal). Though the age groups differed with respect to seizure type, this did not affect driving safety, as measured by motor vehicle collisions and driving disobedience. *Conclusions:* We found a high rate of driving disobedience despite the requirement for mandatory reporting and seizure type did not affect driving safety.