Abstracts

PILOT STUDY: THE VALIDITY OF THE QUEENS SQUARE SCREENING TEST FOR VISUAL DEFICITS IN A COHORT OF PATIENTS WITH DEMENTIA

1Leah Kim*, 2Dennis Cordato, 3Alan McDougall, 4Clare Fraser. 5Sydney Eye Hospital, Sydney, NSW, Australia; 6Liverpool Hospital, Sydney, NSW, Australia; 4Clare Fraser, 4Save Sight Institute, Sydney, NSW, Australia

Methods We assessed the QS test in participants with dementia, mild cognitive impairment (MCI), and healthy controls. Participants were recruited from the Neurology and Geriatrics departments of a tertiary hospital over 3-months. Cognitive impairment was measured using the Rowland Universal Dementia Assessment Scale (RUDAS).

Results Twenty-six patients were examined. There were no statistically significant differences in age, gender, English fluency, and education between the three groups. Participants with dementia (n=8, mean RUDAS 17.5/30) scored 51.4/71 on the QS test, compared to 60.7/71 in MCI (n=7, mean RUDAS 25.0/30) and 64.6/71 in controls (n=11, mean RUDAS 27.4/30). The mean scores for each subset of the QS test for dementia, MCI and normal cognition, respectively, were: early visual processing – 19.6/25, 22.4/25, 23.7/25; object perception – 5.6/11, 7.9/11, 8.7/11; space perception – 11.4/14, 11.1/14, 12.4/14; face perception – 4.4/8, 6.4/8, 7.0/8; reading – 10.4/13, 12.9/13, 12.8/13.

Conclusion In this pilot study, the QS test was markedly abnormal in dementia but did not differentiate between MCI and normal cognition. Our findings suggest that deficits in early visual processing, reading, and the perception of objects and faces are common in dementia. Understanding the types of visual difficulties may improve the care of patients with dementia.

CONTINUOUS EEG MONITORING IN AUSTRALIA: 5 FIRST YEAR AUDIT OF PRACTICE 2018–2019 OF A COMBINED HOSPITAL EPILEPSY PROGRAM IN MELBOURNE

1, 2Joshua Laming*, 1Georgia Grant, 1Cecilia Harb, 1Elsa White, 1, 2Terence O’Brien, 1, 2Patrick Kwan. 1Department of Neurology, Alfred Hospital, Melbourne, VIC, Australia; 2Department of Neurology, Royal Melbourne Hospital, Melbourne, VIC, Australia

Methods Data was collected retrospectively from consecutive patients who underwent cEEG monitoring as part of their acute inpatient care between Jan 2018 to Dec 2018 at the Alfred and Royal Melbourne Hospitals. All inpatient EEG studies over 1 hr were included. Elective cases from the epilepsy monitoring unit were excluded. Demographic and clinical information regarding their admission was collected. Descriptive statistics, and comparative analysis was performed.

Results There were 94 patients identified that underwent cEEG. 50% were male and 50% female, with an average age of 51.3 yrs. 45% were performed in the ICU, and 55% on the acute medical ward. The average duration of recording per patient was 86.2 hrs or 3.6 days. Of 89 of 94 available cEEG reports, seizures were seen in 53%, the majority being non-convulsive. Interictal discharges were seen in 60%. 19% (13/67 of available records) were dead at the time of the audit.

Conclusion Non-convulsive seizures and non-convulsive status epilepticus is common and widely underrecognized without cEEG. We present 94 cases as part of our newly expanding cEEG program across two major Australian hospitals over a one year period, 53% with seizures which were predominantly non-convulsive. A prospective database will be designed for further quality improvement and future research.

CLADRIN: CLADRIBINE AND INNATE IMMUNE RESPONSES

1Mastura Monif*, 2Shokoufeh Abdollahi, 3Jim Stankovich, 4Vicki Malby, 3, 4Jeanette Lechner-Scott, 5, 6Tomas Kalincik, 6John Hamilton, Terence O’Brien 5, 6, 7

Methods This will be a Phase IV, multi-centre, 3 year, translational trial. Patients who are starting Cladribine as part of their routine clinical care will consent to take part in the study. Monocyte numbers and activation states will be measured at various times prior and after commencement of therapy. In addition, and in an in vitro setting the effect of Cladribine on peripheral innate immune cells (monocytes), and its effect on P2X7R, is unclear, and forms the basis of this study.

Results Cladribine Tablets (Mavenclad®) is nucleoside analogue of deoxyadenosine, and an oral treatment for relapsing remitting MS (RRMS). In RRMS clinical trials, Cladribine has been shown to reduce brain atrophy, relapse rates, and new lesions on brain MRI. P2X7R is a purinergic receptor expressed in innate immune cells, and is thought to play a critical role in neuroinflammation. The mechanism of action of Cladribine on peripheral innate immune cells (monocytes), and its effect on P2X7R, is unclear, and forms the basis of this study.