019 DIFFERENTIATING STATUS EPILEPTICUS FROM PROLONGED PSYCHOGENIC NON-EPILEPTIC SEIZURES – CAN PERIPHERAL CELL RATIOS HELP?

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Objectives Differentiating status epilepticus (SE) from prolonged episodes of psychogenic non-epileptic seizures (PNES) is not always straight forward and treatment paradigms are dichotomous with potential for harm from misdiagnosis. This study aims to identify the utility of the neutrophil-to-lymphocyte ratio (NLR), neutrophil-to-monocyte ratio (NMR), monocyte-to-lymphocyte ratio (MLR) and platelet-to-lymphocyte ratio (PLR) in differentiating between SE and PNES.

Methods Retrospective case control study in adults presenting to a tertiary hospital between April 2017 and December 2020. SE was defined as per ILAE criteria for time point 1. PNES events needed to meet the same time criterion. Patients were excluded if they had other factors that altered peripheral cell counts. After screening 1052 cases, 69 SE events from 56 patients and 38 prolonged PNES events from 22 patients were analysed.

Results NLR, NMR, MLR and PLR were all significantly higher in SE compared with PNES with mean values of 6.91 vs 2.09, 11.03 vs 7.94, 0.59 vs 0.27 and 189.7 vs 102.3, respectively. Using receiver operating curves, cut off values for NLR, NMR, MLR and PLR of >3.175, >9.36, >0.435 and >129.5 respectively were identified, yielding sensitivities and specificities of 60.87% and 89.47%, 53.62% and 78.95%, 56.5% and 94.7%, 59.42% and 86.84% respectively. AUC ranged from 0.689 to 0.7931.

Conclusion Patients with SE had significantly higher peripheral cell ratios than those with PNES. When the diagnosis is in doubt, elevated cell ratios can be used to increase diagnostic certainty. However, where cell ratios are not elevated, further investigations are required.

020 REAL-TIME CAPTURE OF PATIENT-REPORTED OUTCOMES USING A DIGITAL PLATFORM – A PILOT STUDY

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Objectives To demonstrate proof of concept/feasibility of a novel digital platform using real-time capture of patient-reported outcomes for real-world research involving patients with epilepsy.

Methods The phone app collects multi-faceted patient-reported outcomes including seizure frequency, medication side effects, mood, anxiety, quality of life and cognition along with voice and digital images. Patients are invited through a national consortium of 18 adult epilepsy centres in Australia. The patient-reported information potentially allows feedback to their treating specialists and tertiary centre in near real-time, along with deidentified aggregation across all participating centres for comparison. Currently, more than 40 patients are enrolled. We present the outcomes of one patient, with the longest-running data points. The new platform was developed by KeyLead Health TM, Melbourne Australia.

Results The results report a single patient's composite scores for mood, sleep, cognition seizures and medication side-effects from the first 1.5 months.

Conclusions Our digital phone platform has the potential to facilitate the more effective and efficient capture of longitudinal data enhancing real-world research data integrity along with patient and specialist engagement.

Table: Patient reported outcomes for single patient captured using digital phone app **date** 4/1 7/1 10/1 15/1 20/1 1/2 15/2 18/2

Side effects	4.5 3.8 3.4 3.4 3.4 3.4 3.3 3.8
Memory	9 1 7 5 5 6 7 6
Seizures	3 0 0 1 1 1 2 0
Reaction time	7.7 7.1 12.4 7.0 7.7 7.7 7.9 6.7
Mood	17 16 15 15 12 15 18 16
Sleep	12 6 8 4 3 10 8 5

021 RELATIONSHIPS BETWEEN COGNITIVE IMPAIRMENT AND CLINICAL FEATURES OF IDIOPATHIC INTRACRANIAL HYPERTENSION

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Objective To determine whether cognitive impairments in patients with Idiopathic Intracranial Hypertension (IIH) are correlated with changes in visual processing, weight, waist circumference, mood or headache and whether they change over time.

Methods Twenty-two newly diagnosed IIH patients participated, with a subset assessed longitudinally at 3 and 6 months. Both conventional and novel ocular motor tests of cognition were included: Symbol Digit Modalities Test (SDMT), Stroop Colour and Word Test (SCWT), Digit Span, California Verbal Learning Test (CVLT), prosaccade (PS) task, antisaccade (AS) task, interleaved antisaccade-prosaccade (AS-PS) task. Patients also completed headache, mood and visual functioning questionnaires.

Results IIH patients performed more poorly than controls on the SDMT ($p<.001$), SCWT ($p=.021$), Digit Span test ($p<0.001$) and CVLT ($p=.004$) at baseline, and generated a higher proportion of AS errors in both the AS ($p<.001$) and AS-PS tasks ($p=.007$). Further, IIH patients exhibited prolonged latencies on the cognitively complex AS-PS task ($p=.034$). While weight, waist circumference, headache and mood did not predict performance on any experimental measure, increased retinal nerve fibre layer (RNFL) was associated with AS error rate on both the block ($F(3, 19)=3.22$, $B=0.30$, $p=0.022$) and AS-PS task ($F(3, 20)=2.65$, $B=0.363$,