

Scores were significantly correlated with the blood pressure change during head-up tilt (OS: $r=-0.445$; NS: $r=-0.354$; $p<0.001$). Patients with orthostatic intolerance had significantly higher symptom scores compared to controls (OS: 66.5 ± 18.1 vs. 17.4 ± 12.9 ; NS: 19.9 ± 11.3 vs. 10.2 ± 6.8 ; $p<0.001$, respectively). **Test-retest reliability:** Both symptom scores were highly reliable (OS: $r=0.956$; NS: $r=0.574$, respectively; $p<0.001$) with an internal consistency of 0.978 and 0.729, respectively. **Conclusions:** Our initial results demonstrate that the ODSS is capable of producing valid and reliable Orthostatic and Non-Orthostatic Symptom Scores.

P.112

Hospital readmission following neurology discharge: A systematic review

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Background: Unplanned hospital readmission is inconvenient for patients, puts them at risk of harm, and is a resource strain. We reviewed available literature on risk factors for readmission following discharge specifically from neurology inpatient services with a focus on factors unique to non-stroke neurology admissions. **Methods:** We conducted a systematic search using PRISMA methodology of MEDLINE, EMBASE, and CENTRAL databases up to January 1, 2018. Two independent reviewers screened articles for inclusion. English-language articles were included that identified factors related to hospital readmission after discharge from a neurology service. Admissions with stroke as the primary focus were excluded. **Results:** Of 9508 unique abstracts, 25 met inclusion criteria and were included for review. Multiple factors impacting probability of readmission were identified including age, living alone, history of nonepileptic seizure, length of stay, services consulted during hospital stay, hospital volume, and severity of illness. **Conclusions:** There are identifiable risk factors that influence likelihood of readmission to hospital following discharge from neurology inpatient services, although the non-stroke literature is sparse. There is a need for future prospective work to investigate modifiable risk factors and opportunities to reduce readmission rates and improve patient safety.

P.113

Down Syndrome: robust neurophysiological perspectives

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Background: Down Syndrome (DS) has a mosaicism of presentations, but a number of common features. Cerebral evoked potentials (somatosensory, visual and auditory) can be higher in amplitude in DS. The aim of this study is to explore the value of the neurophysiological amplitude of three different modalities in DS individuals undergoing spinal surgery, or epilepsy evaluation. **Methods:** Standard procedure of EEG evaluation was conducted. We routinely monitor somatosensory (SSEP) and motor evoked potentials (MEP), using peripheral nerves stimulation and transcranial electrical stimulation during surgery. We report findings from 14 DS individuals age-matched to 14 individuals with idiopathic scoliosis. **Results:** The amplitude of the SSEP is significantly higher in DS individuals than in age-matched controls using the same parameters.

SSEP; $10.2\pm 2.5\mu V$ vs $2.4\pm 2.3\mu V$ ($p<0.05$, paired t-test). The threshold for eliciting MEPs was also significantly lower in DS in comparison to controls, $175\pm 20V$ vs $629\pm 100V$, ($p<0.05$, paired t-test). Interictal EEG showed high amplitude spike and waves, and greater intracortical coherence in DS with epilepsy than non-DS patients. **Conclusions:** Robust neurophysiological findings showed high amplitude sensory evoked potentials, low threshold motor evoked potentials, and high amplitude spikes and wave, all reflect a common process of increased neuronal synchronicity and oscillatory behaviour in Down Syndrome.

P.114

Twice negative PCR in a patient with HSV-1 Encephalitis

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Case Description: A 64 year-old male presented with left-sided weakness and altered level of consciousness after a suspected seizure. MR Brain demonstrated right mesial temporal lobe diffusion restriction. Empiric antiviral and antibiotic treatments were initiated despite CSF negative for HSV/VZV and enteroviruses. Lumbar puncture on admission day five was unchanged and empiric treatments were discontinued. On day 13 he deteriorated into status epilepticus necessitating ICU transfer. A third lumbar puncture demonstrated elevated protein and HSV-1 positive PCR. Acyclovir was restarted with guarded prognosis. **Discussion:** Detection of HSV-1 in CSF is considered the diagnostic gold standard for HSV-1 encephalitis. The validated multiplex assay used in Alberta, Canada has a 95% level of detection significantly better than the recommended threshold for HSV laboratory diagnosis. Previous reports have indicated that CSF PCR may be negative early in the disease course. Others have suggested that initially negative/follow up positive HSV PCR cases may represent secondary reactivation or release from underlying tissue damage. Consideration of the full clinical picture is crucial in patients with HSV negative PCR. Continuation of antiviral therapy may be appropriate in select HSV PCR negative patients.

P.115

Association of phantogeusia with Parkinson Disease

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Background: Phantogeusia associated with Parkinson Disease has not heretofore been reported. **Methods:** A 59 year old right handed female presented with a four year history of a bitter, sour and sweet taste on her entire tongue and roof of her mouth, 8/10 intensity, constant, persistent, without any external stimuli. Drinking water tasted bitter and sour. The phantogeusia was unresponsive to dietary changes, gabapentine, and allergy medications. **Results:** Abnormalities in Neurological examination: Decreased blink frequency. Hypokinetic. Hypomimetic face. Mood appears sad. Cranial Nerve (CN) examination: CN III, IV, VI: Saccadization of horizontal eye movements. Motor Examination: Pill rolling tremor in right hand. 1+ cogwheel rigidity in left upper extremity. Gait: 2+ retropulsion. Chemosensory testing: Olfactory: Alcohol Sniff Test: 6 (anosmia). SNAP Phenylethyl Alcohol Threshold Testing left -2.5 (hyposmia)