

search strategy. Relevant literature on palliative care in PSP and MSA was also reviewed. Results from both searches were qualitatively combined in order to suggest triggers for targeted palliative care throughout the disease trajectory. **Results:** ‘Milestones’ are well documented and clinically relevant disease points that prompt further care. Important milestones include: frequent falls, cognitive impairment, unintelligible speech, severe dysphagia, wheelchair dependence, urinary catheterisation, and nursing home placement. PSP-Richardson syndrome accumulates milestones earlier than PSP-Parkinsonism or MSA. Many PSP patients already have falls and cognitive impairment at the time of diagnosis. Time from milestone to death is variable. **Conclusions:** Milestones can be used to trace disease progression and help predict survival. Clinical milestones are likely to be important triggers for targeted palliative care interventions including the early incorporation of a palliative approach to care or referral to specialised palliative care services.

P.079

Factors influencing HINTS exam usage by Canadian Emergency Medicine Physicians

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doi: 10.1017/cjn.2021.358

Background: The HINTS examination is a sensitive and specific tool for determining whether a patient presenting with an acute vestibular syndrome has had a stroke. Despite its efficacy, it is often not used by Emergency Medicine (EM) physicians when assessing patients with vertigo. **Methods:** To ascertain why, we surveyed, by email, physicians registered with the Canadian Association of Emergency Physicians, to gather information on their practices when assessing patients with vertigo, and their utilization and perspectives concerning the HINTS examination. **Results:** 185 participants responded to our survey, demographically representative of Canadian EM physicians. The majority regularly use the HINTS exam in the appropriate setting, but significant minorities employ the exam inappropriately, such as in patients without nystagmus, with other neurological findings, or alongside tests for intermittent vertigo. Misapplication was associated with older age, years of practice, non-academic practice settings, and less residency training ($p < 0.05$). The predominant reasons for not using this examination are lack of confidence in recalling and performing component exam techniques, particularly the head-impulse test, and doubts about the necessity, safety, or validity of this examination. **Conclusions:** HINTS examination use is limited by lack of provider skill, safety concerns, and doubts on its validity in excluding stroke when employed by EM physicians.

P.080

Cognitive Profile, Disease Characteristics, and Neuroimaging Findings in Susac Syndrome: A Case Series of Seven Participants from British Columbia

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doi: 10.1017/cjn.2021.359

Background: Susac Syndrome (SuS) is a rare autoimmune disorder of the cerebral, retinal, and inner ear microvasculature. One of the cardinal manifestations of central nervous system (CNS) involvement is encephalopathy, however the cognitive profile in SuS is poorly characterized in the literature. **Methods:** In this cross-sectional case series of seven participants diagnosed with Susac Syndrome in remission in British Columbia, we use a battery of neuropsychological testing, subjective disease scores, and objective markers of disease severity to characterize the affected cognitive domains and determine if any disease characteristics predict neuropsychological performance. We also compare this battery of tests to neuroimaging markers to determine if correlation exists between radiographic markers of CNS disease and clinical evaluation of disease severity. **Results:** There were a variety of cognitive deficits, with memory and language dysfunction being the most common. Despite the variability, performance on some neuropsychological tests (MoCA) correlated to markers of functional disability (EDSS). Additionally, MoCA and EDSS scores correlated with neuroimaging findings of both corpus callosum and white matter changes. Finally, psychiatric scores correlated with participant reported scores of disease severity. **Conclusions:** There is a relationship between cognitive deficits, subjective and objective disease disability, and neuroimaging findings in Susac Syndrome.

P.081

Epidemiology of Neurological and Cardiac Complications of COVID-19 among Ontario Visible Minorities: A Retrospective Study of Chinese and South Asian Canadians

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doi: 10.1017/cjn.2021.360

Background: This is a population-based retrospective study of neurological and cardiac complications of COVID-19 among

Ontario visible minorities: Chinese and South Asian Canadians
Methods: From January 1, 2020 to September 30, 2020, using the last name algorithm, rates and types of cardiac and neurological complication of these two cohorts along with the general population in Ontario with COVID-19 were analysed by Institute of Clinical Evaluative Sciences. **Results:** Preliminary results show that Chinese-Canadians (N= 1,186) with COVID-19 are older with a mean age of 50.74 years old compared to general population (N= 42,547) of 47.57 years old (P< .001), while South Asians (N= 3,459) have a younger mean age of 42.08 years old (P< .001). Total cardiac and neurological complication rates, hospitalization rates and ICU admission rates are all higher for Chinese-Canadians while they are lower in South Asians and all achieving statistical significance (P < .001). Overall mortality rate is significantly higher for Chinese-Canadians at 8.1% vs 5.0% general population (P < .001). **Conclusions:** Chinese-Canadians with COVID-19 in Ontario were much older and have higher cardiac and neurological complication rates and overall mortality rate than the general population. These data have significant implications for proper prevention and appropriate management for these vulnerable elderly Chinese-Canadians.

P.082

The Toronto Concussion Study: The Feasibility and Effects of Early Prescribed Aerobic Exercise on Recovery and Post-Concussive Symptoms in Adults – A Pilot Study

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doi: 10.1017/cjn.2021.361

Background: Evidence suggests that aerobic exercise (AE) soon after concussion may facilitate earlier recovery in athletes. The purpose of this pilot study was to investigate the feasibility and effects of early sub-symptom threshold AE on symptom trajectory and recovery time in a heterogeneous adult population. **Methods:** Adults presenting within 7 days of concussion were randomized to either the experimental group: prescribed AE (90% of symptom-limited heartrate achieved on Buffalo Concussion Treadmill Test [BCTT]), 30 minutes/day, 5 days/week, or the control group: standard of care exercise recommendations. Participants were assigned a heartrate monitor bracelet to track activity. They underwent serial treadmill testing to monitor exercise tolerance, update prescriptions and determine recovery. **Results:** 20 participants (10 per arm) completed the BCTT protocol within 7 days of injury, with 8/20 demonstrating exercise tolerance at week 1. 66% (4/6) of those in the experimental group were recovered by week 4, compared to only 43% (3/7) in the control group. Average heart rate monitor compliance was 32% of the prescribed time among all participants, and self-reported exercise prescription compliance was 43% in the experimental group. **Conclusions:** Early post-concussion aerobic exercise in the general adult population is a promising intervention; this study will inform the design of a larger trial.

P.083

Early and 30-day clinical and neuropsychological effects of iatrogenic brain infarcts in the ENACT randomized-controlled trial

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doi: 10.1017/cjn.2021.362

Background: Small brain infarcts are often seen on diffusion-weighted MRI(DWI) following surgical/endovascular procedures. Little is known about their clinical effects. We examined the association of iatrogenic infarcts with outcomes in the ENACT(Evaluating Neuroprotection in Aneurysm Coiling Therapy) trial of nerinetide in endovascular aneurysm repair. **Methods:** In this post-hoc analysis, we used multi-variable models to evaluate the association of presence/number of DWI iatrogenic infarcts with NIHSS(-National Institutes of Health Stroke Scale), mRS(modified Rankin Scale), and cognitive/neuropsychological scores(30-minute battery) at 1-4 and 30-days post-procedure. We also related infarct number to a Z-score-derived composite outcome score(quantile regression). **Results:** Among 185 patients(median age:56,IQR:50-64), 124(67.0%) had iatrogenic infarcts(median:4,IQR:2-10.5). Nerinetide resulted in fewer infarcts. Patients with infarcts had lower Mini-Mental State Exam(MMSE) scores at 2-4 days(median:28 vs 29, adjusted-coefficient[acoef] per additional infarct:-1.11,95%CI:-1.88 to -0.34,p=0.005). Infarct number was associated with worse day-1 NIHSS(aOR for NIHSS \geq 1:1.07,1.02-1.12,p=0.009), day 2-4 mRS(adjusted common odds-ratio[aOR]:1.05,1.01-1.09,p=0.005) and MMSE(acoef:-0.07,-0.13 to -0.003,p=0.040), 30-day mRS(aOR:1.04,1.01-1.07,p=0.016) and Hopkins Verbal Learning Test scores(acoef:-0.21,-0.39 to -0.03,p=0.020), as well as worse composite scores at 1-4 and 30-days(acoef:-0.09,-0.15 to -0.03, p=0.006). **Conclusions:** Iatrogenic infarcts were associated with subtle differences in post-procedural(1-4 days) and 30-day outcomes in this middle-aged cohort. Future studies should use batteries of similar/greater granularity to validate optimal measures for short- versus long-term manifestations.

P.084

Pilot Program to Determine Impact of an Orthoptic Clinic on Patient Perceived Quality of Life of Stroke Patients

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doi: 10.1017/cjn.2021.363

Background: Visual impairment exists for an estimated 70% of individuals who have experienced a stroke. Identification and remediation of visual impairments can improve overall function and perceived quality of life. Our project aims to improve visual assessment and timely intervention for patients with post-stroke