themes identified included a preference for re-imaging patients in 3-5 days after initiating treatment to look for complete or partial clot resolution, at which point most experts would then be comfortable proceeding with revascularization if indicated, though uncertainty regarding the optimal timing of revascularization was noted. Conclusions: In cases of ILT in the “hot carotid” practice patterns of global experts show a preference for using anticoagulation and reimaging patients in 3-5 days, though there is considerable equipoise regarding the most appropriate management of these patients.

P.064

Enhancing the neuroprotective properties of edaravone using glutathione nanogel as a promising carrier for brain drug delivery in transient global ischemia in a rodent model

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Background: Edaravone (EDV) is an antioxidant that scavenges ROS, which is known to associate with pathophysiology of ischemic stroke. Low stability and bioavailability are major EDV drawbacks. Decorating nanogel surface with glutathione to target brain tissue was performed to optimize drug delivery. Methods: Nano vehicle characterization was assessed with FT-IR and HNMR. Images from the surface of nano vehicle was captured by AFM and TEM instruments. After development of mPEG-b-PLGA EDV nano particles, their effect on biochemical factors including malondialdehyde and protein carbonyl level was measured. FRAP were also measured. Results: The Size (199 nm, hydrodynamic diameter) and zeta potential (-25 mV) of optimum formulation was assessed and the calibration curve in deionized water was created at 244 nm. In-vitro drug release profile depicted a sustained release process. EDV and glutathione presence in one vehicle simultaneously, resulted in elevated spatial memory and learning along with cognitive function. In addition, significantly lower MDA and PCO, and higher level of neural GSH and FRAP were observed. Conclusions: The developed mPEG-b-PLGA EDV nanogel can be a suited vehicle for brain drug delivery of EDV, while managing to minimize the biochemical and pathophysiological alterations in ischemic-like disorder.

P.065

Comparison in outcomes by sex in acute ischemic stroke patients treated with alteplase versus tenecteplase: a subgroup analysis of AcT


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Background: Sex differences in treatment response to intravenous thrombolysis (IVT) are poorly characterized. We compared sex-disaggregated outcomes in patients receiving IVT for acute ischemic stroke in the Alteplase compared to Tenecteplase (AcT) trial, a Canadian multicentre, randomised trial. Methods: In this post-hoc analysis, the primary outcome was excellent functional outcome (modified Rankin Score [mRS] 0-1) at 90 days. Secondary and safety outcomes included return to baseline function, successful reperfusion (eTICI2b), death and symptomatic intracerebral hemorrhage. Results: Of 1577 patients, there were 755 women and 822 men (median age 77 [68-86]; 70 [59-79]). There were no differences in rates of mRS 0-1 (aRR 0.95 [0.86-1.06], return to baseline function (aRR 0.94 [0.84-1.06]), reperfusion (aRR 0.98 [0.80-1.19]) and death (aRR 0.91 [0.79-1.18]). There was no effect modification by treatment type on the association between sex and outcomes. The probability of excellent functional outcome decreased with increasing onset-to-needle time. This relation did not vary by sex (Pinteraction 0.42).

Conclusions: The AcT trial demonstrated comparable functional, safety and angiographic outcomes by sex. This effect did not differ between alteplase and tenecteplase. The pragmatic enrolment and broad national participation in AcT provide reassurance that there do not appear to be sex differences in outcomes amongst Canadians receiving IVT.

P.067

The decision to revascularize in symptomatic non-stenotic carotid disease: results from the Hot Carotid Qualitative study

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Background: Little evidence exists to guide the management of symptomatic non-stenotic carotid disease (SyNC). SyNC, which refers to carotid lesions with less than 50% artery stenosis, has been increasingly implicated as a cause of stroke and TIA. Methods: Semi-structured interviews with 22 stroke physicians from 16 centers were conducted as part of the Hot Carotid Qualitative Study. This study explored decision-making approaches, opinions and attitudes regarding the management of
symptomatic carotid disease. Presented here are a subset of results related to the decision to revascularize patients with SyNC. Results: Thematic analysis revealed equipoise in the decision to revascularize patients with SyNC. Participants discussed a desire to use imaging features (e.g. plaque rupture and plaque morphology) to inform the decision to revascularize, though significant uncertainty remains in appraising the risk conferred by certain features. Experts support further study to better understand the use of these features in risk appraisal for patients with SyNC. Conclusions: The decision to revascularize patients with SyNC is an area with significant equipoise. Experts identify the use of imaging features as an important tool in informing the decision to pursue revascularization in patients with SyNC though more study is required in this area to better inform practice.

CHILD NEUROLOGY (CACN) EPILEPSY AND EEG

P.068

Quality improvement in Infantile Spasms through standardization: a tertiary-care centre retrospective chart review implementation study

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Background: Infantile Spasms (IS) is a rare epilepsy syndrome with characteristic features, and a strong consensus regarding treatment strategies. Clinical care pathways provide standardized and evidence-based patient care, support care quality and improve patient outcomes. Standardized electronic notes may support data collection and quality. After the concurrent implementation of an IS pathway and standardized electronic note at the Alberta Children’s Hospital in 2015, improvements in patient outcomes and quality of care were anticipated. Methods: A single-centre, retrospective chart review of patients diagnosed with Infantile spasms in Alberta, Canada from 2011-2019 was completed. Patient characteristics and outcomes were analyzed by pre-pathway and post-pathway implementation status. Results: Rates of 3-month spasm remission, and of remission without relapse did not significantly differ between pre- and post-pathway cohorts. Rates of 2-week spasm remission were not obtainable from a significant proportion of pre-pathway patient records when compared to the post-pathway group, indicating patient record quality improved following the electronic note implementation. A significant proportion of patients received Prednisolone as their first treatment for IS post-pathway implementation compared to pre-pathway (p<0.001). Conclusions: A single-centre experience with concurrent implementation of an IS pathway and standardized electronic note demonstrated no significant changes in patient outcomes. Potential improvements for patient care are identified.

NEUROCRITICAL CARE

P.070

Serial Neurological Assessment in Pediatrics (SNAP) compared to the Glasgow Coma Scale (GCS) in PICU

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Background: Glasgow Coma Scale (GCS) is the gold standard for neurological assessment in traumatic head injury. Limitations to GCS include variations in rater reliability, test setting and sedation/intubation. Serial Neurological Assessments in Pediatrics (SNAP) was designed to standardize neurological assessment. We examined the efficacy of SNAP for earlier detection of acute neurological decompensation. Methods: Retrospective analysis identified patients with acute neurological decline (drop in GCS of >2 in 1 hour). We reviewed GCS and SNAP (calculated using neurological consultant notes) scores 48 hours prior to decline. Slopes were calculated for each score over time. Results: Four patients were eligible, with > 2 GCS and SNAP scores available for calculation. Average slopes for GCS were 1.3, -0.8, 1.6 and 2.1 for eyes, voice, motor, and total GCS, respectively, and -2.6, 0, -2.4, -2.4, -2.0, -2.8 and -11.9 for mental status, cranial nerve, communication, left and right upper extremities, left and right lower extremities, and total SNAP.