and outcomes, accounting for severity of brain injury and postnatal infection. *Results:* 46 neonates had HC <10th percentile at birth (SHC) which predicted poorer motor (~4 points; p=0.001) and cognitive (~4 points; p=0.005) outcomes, relative to those with normal HC at birth. In 9 of these neonates, SHC persisted to discharge; they had dramatically lower motor scores (15 points; p=0.004) and cognitive scores (12 points; p<0.001), even after adjusting for known risk factors Those born with SHC whose HC normalized by discharge did not show significantly poorer outcomes than those born with normal HC. *Conclusions:* The relationship between small HC at birth and adverse neurodevelopmental outcomes can be attenuated with normalization of head growth through the period of neonatal intensive care.

CNS / CSCN Chair's Select Abstracts

B.01

CNS Francis McNaughton Memorial Prize

Predictors of dysphagia screening after acute ischemic stroke: Who gets tested?

RA Joundi (Toronto)* R Martino (Toronto) G Saposnik (Toronto) J Fang (Toronto) V Giannakeas (Toronto) MK Kapral (Toronto)

Background: Dysphagia is a devastating complication of stroke and can lead to malnutrition, immobility, aspiration pneumonia, and death. Guidelines advocate screening all patients with acute stroke for swallowing impairment. However, previous research suggests only 60% are screened, and it is unclear what factors contribute to receiving dysphagia screening. *Methods:* We used the Ontario Stroke Registry to identify patients who were admitted to Regional Stroke Centres from 2010-2013. We used multivariable regression to identify predictors of receiving a dysphagia screen within 72 hours. *Results:* Among 7172 patients with acute ischemic stroke, 1705 patients (23.8%) did not undergo screening. Factors increasing the odds of being tested were: Stroke unit admission (adjusted odds ratio aOR 6.5), presenting with speech deficits (aOR 1.9) or weakness (aOR 1.5), or receiving thrombolysis (aOR 1.9). Seizure (aOR 0.49) and mild stroke (aOR 0.59 vs moderate stroke) decreased the odds of being tested. Among those with mild strokes who received a swallowing screen, 33% failed. *All p<0.0001. *Conclusions:* Patients with mild stroke are at risk of not being screened for dysphagia, despite a significant fail rate among those tested. This may expose untested patients to a higher risk of complications from dysphagia, and suggests a gap in process of care that should be addressed.

B.02

CSCN Herbert Jasper Prize

Burst-suppression EEG is reactive to photic stimulation in comatose children with acquired brain injury

DA Nita (Toronto)* M Moldovan (Copenhagen) R Sharma (Toronto) S Avramescu (Toronto) H Otsubo (Toronto) CD Hahn (Toronto)

Background: Burst-suppression is an electroencephalographic pattern observed during coma and reflects severe encephalopathy. We investigated the reactivity of burst-suppression to photic stimulation in children with acquired brain injury. *Methods:* Intensive care unit electroencephalographic monitoring recordings containing burst-suppression were obtained from 5 comatose children with acquired brain injury of various etiologies. Intermittent photic stimulation was performed at 1 Hz for 1 minute to assess reactivity. We quantified reactivity by measuring the change in the burst ratio (fraction of time in burst) following photic stimulation. *Results:* Photic stimulation evoked bursts in all patients, resulting in a transient increase in the burst ratio, while the mean heart rate remained unchanged. The regression slope of the change in burst ratio, referred to as the standardized burst ratio reactivity, correlated with subjects' Glasgow Coma Scale scores. *Conclusions:* Reactivity of the burst-suppression pattern to photic stimulation occurs across diverse coma etiologies. Standardized burst ratio reactivity appears to reflect coma severity. Measurement of burst ratio reactivity may represent a simple bedside tool to monitor coma severity in critically ill children.

B.03

The Canadian neurology graduate survey

BJ Murray (Toronto)* P Major (Montreal) A Poppe (Montreal) C Murphy (Vancouver) M Jenkins (London) M Nicolle (London) C Watling (London) HJ McMillan (Ottawa) M Yeung (Calgary) D Callen (Hamilton) H Briemberg (Vancouver) DF Tang-Wai (Toronto) C De Meulemeester (Ottawa) P Brna (Halifax) M Savard (Quebec) D Sahlas (Hamilton) A Yeh (Toronto) G Gubitz (Halifax) F Moore (Montreal) K Khan (Edmonton) K Squarey (St. John's) C Deacon (Sherbrooke) M Esser (Calgary) R Vosoughi (Winnipeg) S Taylor (Kingston) S Weiss (Toronto) E Hollenberg (Toronto)

Background: Planning for neurology training necessitated a reflection on the experience of graduates. We explored practice characteristics, and training experience of recent graduates. *Methods:* Graduates from 2010-2014 completed a survey. *Results:* Response rate was 37% of 211. 56% were female. 91% were adult neurologists. 65% practiced in an outpatient setting. 63% worked in academics. 85% completed subspecialty training (median 1 year). 36% work 3 days a week or less. 82% took general call (median 1 night weekly). Role preparation was considered very good or excellent for most; however poor or fair ratings were 17% in advocacy and 8% in leadership. Training feedback was at least "good" for 87%. Burnout a few times a week or more was noted by 5% (6% during residency, particularly PGY1 and 5). 64% felt overly burdened by paperwork. Although most felt training was adequate, it was poor or fair at preparing for practice management (85%) and personal balance