

was reduced from 75 (interquartile range: 60-93) minutes to 46 (33-59) minutes ( $p < 0.0001$ ). The median DTN time in the early and late post-modification phases was not different (41 versus 46 minutes,  $p = 0.4085$ ). Functional outcome at 3 months was not different in the two groups (proportion of  $mRS \leq 1$ : 34% versus 28%,  $p = 0.882$ ). *Conclusions*: We were able to decrease our DTN time for treatment of acute stroke by implementing simple modifications and these improvements persisted over time.

## P.064

### Delays in the emergency department for stroke patients, medical complications and predictors of outcomes: the McGill experience

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*Background*: The Canadian Stroke Best Practice recommends admission of patients to a specialised stroke unit within three hours. We aimed at assessing delays in our emergency department (ED) and correlating these with medical complications and clinical outcomes. *Methods*: Predictors and outcomes This is a retrospective review of patients ( $n = 353$ ) admitted with ischemic strokes (January 2011-March 2014). We assessed the length of stay in ED, medical complications in ED and in the stroke unit, functional status (modified Rankin Scale) at discharge and survival. *Results*: The median delay in ED was 13.8 hours. The rate of medical complications in the ED was 14% (most common being delirium), compared to the stroke unit with 46.7% (most common being pneumonia). Worse functional outcome was correlated with diagnosis of pneumonia (standardised  $\beta$  coefficient = 0.2,  $p = 0.001$ ) and presence of brain oedema in the stroke unit (standardised  $\beta$  coefficient = 0.2,  $p < 0.01$ ). Increased risk of death was correlated with brain oedema (OR = 649.2, 95%CI = 19-2184,  $p < 0.01$ ) and sepsis in the stroke unit (OR = 26.8, 95%CI = 2.1-339,  $p < 0.01$ ). *Conclusions*: We found a significant delay in the admission of our patients from the ED to the stroke unit, which is not in keeping with the present guidelines. Medical complications were correlated with worse outcomes. Future analyses will correlate ED delays with clinical outcomes.

## P.065

### The impact of a risk algorithm on time-to-care: targeting triage for acute cerebrovascular syndrome (ACVS) patients in a rapid TIA clinic

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*Background*: Approximately, one-third of TIA clinics use the ABCD<sup>2</sup> score to triage referrals. However, the usefulness of the score is limited because of its low specificity for non-cerebrovascular/mimic conditions. Timely access of referred patients to specialized TIA clinics may reduce recurrent stroke. *Methods*: The SpecTRA project implemented a novel electronic triage system in the TIA clinic that services Vancouver Island (BC), which replaced the existing ABCD<sup>2</sup> triage model. A clinical classifier generating an ACVS probability score was calculated on the basis of the clinic

referral form information. Next, a time-varying ABCD<sup>2</sup>-based risk score derived from Johnston et al. (2007) was calculated, which is then weighted by the ACVS probability score to produce a finalized triage score. Time-to-care was compared pre- (2013/14) and post- (2014/15) implementation. *Results*: One year results show a statistically significant improvement in that time-to-care for ACVS patients (ABCD<sup>2</sup> 4/5) was one day earlier with the new triage system (median = 4 days since symptom onset;  $N = 250$ ) compared to the previous year (median = 5 days;  $N = 255$ ) (Mann-Whitney  $U = 38130$ ,  $p < 0.001$ ). No difference in unit arrival times (median = 5 days) for non-cerebrovascular patients was observed (Mann-Whitney  $U = 5563$ ,  $p = 0.15$ ). *Conclusions*: The performance of our ACVS triage system highlights quality improvement potential in time-to-care for outpatient TIA clinics.

## P.066

### Failing a dysphagia screen after acute ischemic stroke is highly predictive of poor outcomes

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*Background*: Bedside dysphagia screening is recommended for all patients with acute ischemic stroke, in order to detect swallowing impairment early and prevent complications. However, limited data are available on outcomes associated with failing a dysphagia screen. *Methods*: We used the Ontario Stroke Registry to identify patients who were admitted to Regional Stroke Centres from 2010-2013 and received a dysphagia screen within 72 hours. We used multivariable regression to determine outcomes of patients who failed the dysphagia screen. *Results*: Among 5145 patients who underwent dysphagia screening, 2458 (47.8%) failed and 2687 (52.2%) passed. Patients who failed had more co-morbidities and presented with more severe strokes (mean NIHSS 11.0 vs. 5.4). Among those who failed, 9% required permanent feeding tubes, versus 0.1% among those who passed. After controlling for age, co-morbidities, and stroke severity, failing a bedside swallowing screen remained highly predictive of poor outcomes, including decubitus ulcer (adjusted odds ratio aOR 10.5), pneumonia (aOR 4.6), discharge to long-term care (aOR 4.1) and 30-day mortality (aOR 4.5; 16.6% vs. 2.2%). \*All  $p < 0.0001$  *Conclusions*: Patients who failed a dysphagia screen on admission had dramatically worse outcomes after controlling for baseline factors. A bedside dysphagia screen provides immediate risk stratification for acute stroke patients and can be used to guide appropriate care.

## P.067

### Incidence of tissue-defined stroke and large vessel occlusion in acute stroke alerts in a non-teaching hospital system

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*Background*: Stroke alerts are used to triage patients with acute neurologic change for rapid imaging evaluation. CTA has been advocated to rapidly triage stroke patients for endovascular therapy. However, the yield of this approach is not well established. We