Sensitivity of the RACE score in the detection of large vessel occlusions during working and non-working hours.

**Introduction**

Multiple studies have shown that faster treatment times for ischemic strokes result in improved clinical outcomes. Pre-hospital triage scores aim to identify large vessel occlusions in the field and allow earlier activation of stroke teams in the hospital.

**Objective**

To compare the sensitivity of the pre-hospital Rapid Arterial oCclusion Evaluation (RACE) score for the detection of large vessel occlusions during working hours and non-working hours.

**Methods**

We retrospectively reviewed all patients presenting with a RACE score of ≥5 to one comprehensive and one thrombectomy capable hospital between July 2015 and December 2019. Baseline demographics, time of hospital arrival, presenting NIHSS score, intravenous tPA and mechanical thrombectomy metrics, ninety day modified Rankin scores, discharge disposition, and final discharge diagnosis were recorded. Patients presenting between 7 AM to 6 PM during weekdays were considered to present during ‘Working hours’ whereas patients presenting between 6 PM - 7 AM on weekdays or anytime during weekends were considered to present during ‘Non-working hours’. The primary outcome of interest was diagnosis of large vessel occlusion. Secondary outcomes included diagnosis of neurovascular event, discharge diagnosis, and good clinical outcome defined as ninety day modified Rankin Scale (mRS) of ≤2.

**Results**

Over a 4.5 year period, this study analyzed 687 patients who presented to the hospital via Emergency Medical Services with a RACE score of 5 or more. The average age of the cohort was 71.4 years and women comprised 55% of the cohort. Median NIHSS was comparable in the Working (13) and Non-working (14; p=0.48) groups. Intravenous tPA administration (21.7% vs. 26.5%; p=0.13) and risk factors including hypertension, diabetes mellitus, previous stroke, and prevalence of atrial fibrillation were comparable between the two groups. There was no significant difference in the diagnosis of large vessel occlusion (36.4% vs 34.6%) or final discharge diagnosis. Sensitivity of the RACE score for detection of neurovascular events (TIA, ischemic stroke, intracranial hemorrhage) was improved during non-working hours (75.1%) compared to working hours (67.2%; p=0.02). Although door to groin puncture & recanalization times were shorter during working hours, there was no significant difference in the rate of good clinical outcomes (54.1% vs. 51.5%; p=0.76) in patients undergoing mechanical thrombectomy.

**Conclusion**

The sensitivity of the RACE score for detecting large vessel occlusions does not vary significantly during working and non-working hours. However, patients who present with high RACE scores during working hours are more likely to have a diagnosis of a stroke mimic than those presenting off hours.

**Disclosures**


**P-036 SENSITIVITY OF THE RACW SCORE IN THE DETECTION OF LARGE VESSEL OCCLUSIONS DURING WORKING AND NON-WORKING HOURS**

1E Hitomi, 2M Jumaa, 3S Zaidi, 1J Shawver, 1A Korsnack, 1A Castonguay, 1R Burgess, 1V Kung, 1,2H Salahuddin*. 1Neurology, University of Toledo, Toledo, OH; 2Neurology, Vascular Neurology of Southern California, Thousand Oaks, CA

10.1136/neurintsurg-2021-SNIS.72

**P-037 COMPARISON OF RADIATION EXPOSURE AND CLINICAL OUTCOMES BETWEEN TRANSRADIAL AND TRANSFEMORAL DIAGNOSTIC CEREBRAL APPROACHES: A RETROSPECTIVE STUDY**


10.1136/neurintsurg-2021-SNIS.73

**Background**

Transradial (TRA) catheterization for neuroendovascular procedures is effective and associated with fewer complications than transfemoral (TFA) procedures. However,