Documents

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Utility of A2L2 score in acute ischemic stroke patient triage: the “H.uni” experience
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Abstract
Background and aims: Two or more National Institutes of Health Stroke Scale (NIHSS) points on each motor items (A2L2 score) have shown good accuracy in predicting large vessel occlusion (LVO) in the prehospital setting of acute ischemic stroke (AIS) care. We aimed to study this score for LVO prediction in our stroke network and predictors of poor outcome (PO) after mechanical thrombectomy (MT). Methods: From our Safe Implementation of Thrombolysis in Stroke (SITS) registry including patients receiving reperfusion therapy for AIS, we retrospectively computed the A2L2 score from the admission NIHSS to test the diagnostic accuracy for LVO prediction. Multivariable analysis for independent predictors of LVO on the entire cohort and PO from patients with LVO were performed. Results: From the 853 patients with AIS (67% LVO), A2L2 was positive in 52%. A2L2 score (Odds ratio [OR] 4.6;95%CI 3.36-6.34), smoking (OR 2.1;95%CI 1.14-3.85), atrial fibrillation (OR 1.6;95%CI1.1-2.4) and younger age (OR 0.98;95%CI0.97-0.99) were independent predictors of LVO. A2L2 score showed 82%/49% positive/negative predictive values with 66% accuracy (64%/72% sensitivity/specificity) for LVO prediction. Age (OR 1.05;95%CI 1.03-1.07), atrial fibrillation (OR 4.85;95%CI 1.5-15.7), diabetes (OR 2.62;95% CI 1.14-6.05), dyslipidemia (OR 2;95% CI 1.04-3.87), A2L2 score (OR 2.68;95% CI 1.45-4.98), longer onset-to-groin time (OR 1.003;95% CI 1.001-1.01), MT procedure (OR 1.01;95%CI 1.003-1.02) general anaesthesia (OR 2.06;95% CI 1.1-3.83) and symptomatic intracranial hemorrhage (OR 12.10;95%CI 3.15-46.44) were independent predictors of PO. Conclusions: A2L2 score independently predicted LVO and PO after MT. Patient characteristics and procedural factors determined PO of LVO patients after MT. © The Author(s) under exclusive licence to Belgian Neurological Society 2024.

Author Keywords
A2L2 score; Large vessel occlusion; Reperfusion therapy; SITS Registry

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