

shown that earlier MT resulted in reduced hospital stay and improved living situation at 90 days after stroke.

Aim of Study We hypothesized that delay in MT in patients with LVO would result in worse clinical outcome and increased mortality.

Methods We performed a retrospective analysis of patients who underwent MT for LVO in a comprehensive stroke center (2018 – 2021.) We compared outcomes including in-hospital mortality and 90-day mRS based on time from door-to-puncture and door-to-reperfusion, adjusting for covariates using logistic regression

Results very 10-minute delay to reperfusion decreased the probability of mRS 0–2 at 90 days (OR 0.99, 95%CI 0.98 – 0.99, $p=0.002$), increased the probability of inpatient mortality (OR 1.01, 95%CI 1.00 – 1.01, $p=0.01$), and increased probability of 90-day mortality (OR 1.01, 95%CI 1.00 – 1.01, $p=0.005$.) Adjusting for baseline characteristics ($p=0.01$), PMH ($p=0.01$), admission labs and vital signs ($p=0.002$), initial stroke assessment and management ($p=0.001$), delayed times to reperfusion worsened 90-day mRS. After adjusting for the same groups of variables, delayed times to puncture and reperfusion also increased significantly ($p<0.05$) the probability of mortality while inpatient and at 90 days.

Conclusion Shorter times to puncture and reperfusion impact mRS and mortality in LVO stroke patients. Adequate hospital protocols and education may lead to faster and more efficient stroke activations leading to a shorter time to MT and reperfusion. Goals of door-to-puncture must be established in order to achieve better outcome.

Disclosure of Interest Nothing to disclose

P135/313 PREDICTIVE VALUE OF CT HEAD AND CT ANGIOGRAM IN IDENTIFYING ICAD ASSOCIATED LARGE VESSEL OCCLUSION

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Introduction Mechanical thrombectomy is an established treatment for large vessel occlusion (LVO) in stroke. However, Intracranial Atherosclerotic Disease (ICAD) presenting as LVO can complicate mechanical thrombectomy and increase risks.

Aim of Study The aim of this study was to evaluate pre-thrombectomy imaging for ICAD and assess the predictive value of the hyperdense artery sign on CT head and the tapering sign on CT angiography, respectively.

Methods A retrospective radiological review of ICAD cases was conducted using data from the institutional thrombectomy database. Patients who underwent thrombectomy for large vessel occlusion were selected, and a control group without ICAD was matched to the ICAD group based on age and thrombus location.

Results The study included 26 patients, with 13 diagnosed with ICAD. The mean age of the patients was 56.6 ± 16.1 years. The ICAD group had a lower prevalence of hyperdense thrombus compared to the non-ICAD group (30.8% vs. 84.6%; $p<0.01$), resulting in a sensitivity of 30.8% and a

specificity of 15.4% for detecting ICAD. Tapering at the occlusion site on CT angiography was observed more frequently in the ICAD group (53.8% vs. 7.7%; $p=0.01$), resulting in a sensitivity of 53.9% and a specificity of 92.3% for detecting ICAD. The results demonstrated perfect agreement between the two readers.

Conclusion Our findings suggest a significant association between the absence of the hyperdense artery sign and the presence of tapering at the occlusion site with ICAD in patients with LVO. Incorporating these signs in pre-thrombectomy evaluation has the potential to improve stroke care.

Disclosure of Interest Dr. Joe Leyon has/had consultancy agreements with Microvention Terumo, Medtronic, and Stryker Neurovascular.

P136/338 INTRACRANIAL VESSEL WALL IMAGING – A TERTIARY CENTRE INITIAL EXPERIENCE

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Introduction The recognition of the use of Intracranial magnetic resonance vessel wall imaging (MR-VWI) in clinical practice has gained significantly since its initial attention. Recent research and technological advancement have enabled this tool to assist in diagnosing causes of ischaemic stroke, and also further assist in identifying unstable unruptured aneurysm or ruptured aneurysm when multiple aneurysms are present.

Aim of Study We aim to report and illustrate our initial experience in MR-VWI in a tertiary centre.

Methods Retrospective data collection performed to identify patients' who had MR-VWI study between 2020 and 2022 at a tertiary care centre in England. Radiological and clinical diagnosis were recorded. Images with positive finding were reanalysed for confirmation.

Results A total of 50 VWI studies were identified, with 18 cases demonstrating positive imaging finding. Majority of the ischaemic cases (10) demonstrate imaging characteristic of intracranial atherosclerotic disease (ICAD). 2 cases of vasculitis were identified which were compatible clinically and biochemically. 2 cases of reverse cerebral vasoconstriction (RCVS) were seen, with normal MR-VWI imaging follow up in 6 months. MR-VWI also identified 4 cases of ruptured/unstable aneurysm in acute presentation. Furthermore, MR-VWI was used in 2 cases to support the clinical diagnosis and exclude the aneurysm as the cause of patient's intracranial haemorrhage.

Conclusion Our centre's experience recognises the role of MR-VWI in the imaging of ischaemic stroke, as well as its potential in management of acute unstable intracranial aneurysm. Clinical-radiological correlation remains imperative and emphasis is placed on understanding the potential technical pitfall of MR-VWI.

Disclosure of Interest Nothing to disclose for all authors