

Results Sixty-six patients were included. Median segmented core volume was 6.4 ml (range 0–264 ml). Median core volume was 10.7 ml with CP, 41.1 ml with SV method A, 19.9 ml with SV B, and 29.6 ml with SV C. Agreement based on ICC was good for CP and SV method B and poor for SV methods A and C. MWU was 0.764 for CP and 0.0 for all SV results. The bias was smallest for CP (-6.8 ml).

Conclusion Core volume estimations and accuracy vary significantly between CTP software packages and should be acknowledged. Best agreement with segmented infarct volumes was provided by CP. SV method B with smoothing showed the best results for syngo.via.

Disclosure of Interest nothing to disclose

P132/242 CT ANGIOGRAPHY AND CT PERFUSION IMAGING FOR DETECTING DISTAL MEDIUM VESSEL OCCLUSIONS: A SYSTEMATIC REVIEW AND META-ANALYSIS

¹João Sousa*, ²Anton Sondermann, ¹Sara Bernardo-Castro, ³Ricardo Varela, ¹Helena Donato, ¹João Sargento Freitas. ¹Centro Hospitalar e Universitário de Coimbra, Coimbra, Portugal; ²Christian-Albrechts-Universität zu Kiel, Kiel, Germany; ³Centro Hospitalar e Universitário de Santo António, Porto, Portugal

10.1136/jnis-2023-ESMINT.160

Introduction Distal medium vessel occlusions (DMVOs) are common and often disabling, and the optimal imaging method for its diagnosis is yet to be defined.

Aim of Study To perform a systematic review and meta-analysis of studies to compare the diagnostic performance of CT angiography (CTA) and CT perfusion (CTP) in detecting DMVOs.

Methods We screened PubMed, EMBASE, Web of Science, and Cochrane Central from inception up to March 31, 2023. We included articles reporting accuracy values of CTA and/or CTP and compared the pooled sensitivity and specificity of both imaging methods using a random-effect model. We performed a subgroup analysis on the technique used in CTA and on the subtype of DMVOs (M2-only vs M2+other DMVOs). PROSPERO registration: CRD42022344006

Results We identified 12 studies encompassing 2607 patients, 479 (18.3%) with DMVOs. CTA had significantly lower sensitivity than CTP for detecting DMVOs [0.74, 95%CI (0.63–0.82) vs. 0.89, 0.95%CI (0.83–0.93), $p < 0.01$]. When subgrouped into single-phase and multi-phase CTA, multi-phase CTA had significantly higher sensitivity for DMVO detection than single-phase CTA [0.91, 95%CI (0.85–0.94) vs. 0.64, 95%CI (0.56–0.71), $p < 0.01$], while reaching similar levels to CTP [0.91, 95%CI (0.85–0.94) vs. 0.89, 0.95%CI (0.83–0.93) $p = 0.68$]. The sensitivity of single-phase CTA greatly decreased when extending from M2 to other non-M2 DMVOs [0.74, 95%CI (0.63–0.83) vs. 0.61, 0.95%CI (0.53–0.68), $p = 0.02$] which did not occur in CTP nor in multi-phase CTA. Specificity was high (> 0.85) and comparable between all methods.

Conclusion CTP and multi-phase CTA are the preferred methods for DMVO screening due to their high accuracy.

Disclosure of Interest Nothing to disclose

P133/254 CLINICAL SIGNIFICANCE OF SUBARACHNOID HYPERDENSITIES ON FLAT PANEL CT AFTER MECHANICAL THROMBECTOMY – DOES IT MATTER?

¹Zidan Mousa, ²Franziska Dorn, ¹Felix Bode, ¹Gabor Petzold, ¹Johannes Weller, ²Daniel Paech*. ¹University Hospital of Bonn, Dept. of Neurology, Bonn, Germany; ²University Hospital of Bonn, Dept. of Neuroradiology, Bonn, Germany

10.1136/jnis-2023-ESMINT.161

Introduction Subarachnoid hyperdensities (SH) after mechanical thrombectomy (MT) has been discordant and are mostly considered insignificant.

Aim of Study: We aim to identify the prevalence of SH following MT, associated predictors and the following functional outcomes.

Methods 369 patients from our stroke registry were analyzed for the presence of SH on flat detector computer tomography (FDCT) directly after the MT, and on follow-up dual-energy CT (DECT), then classified according to a visual grading scale. 178 were included with anterior circulation occlusions were included. Regression analysis was performed to identify significant predictors and Kruskal-wallis analysis was performed to test the variables among the different groups. The primary outcome was the modified Rankin score (mRS) at 90 days and was analyzed with the Wilcoxon-Mann-Whitney rank-sum test.

Results Prevalence of SH on FDCT was 37.1% in patients experiencing a significant unfavorable outcome ($p = 0.035$). Significantly fewer patients with SH achieved a mRS ≤ 3 at 90 days (37.9% vs. 53.6%, $p = 0.043$). In addition, mortality was significantly higher in the SH group (34.8% vs. 19.6%, $p = 0.024$). Distal occlusions and a higher number of device passes were significantly associated with SH ($p = 0.035$) and ($p = 0.001$), respectively. Patients who received IV rt-PTA had significantly less SH ($p = 0.024$).

Conclusion Postinterventional SH are a frequent finding after MT and are associated with neurological decline and an unfavourable outcome. They are more common with distal occlusions and multiple device passes.

Disclosure of Interest FD serves as a consultant/proctor for Balt, Cerenovus, Microvention, received scientific grant from Cerenovus and received speaker honoraria from Acanadis, Asahi, Stryker.

2.1 ISCHEMIC – Logistics

P134/298 ENDOVASCULAR THERAPY DELAY FOR ACUTE LARGE VESSEL OCCLUSIONS IS ASSOCIATED WITH WORSE FUNCTIONAL OUTCOME AND INCREASED MORTALITY – QUANTIFIED

Julian Carrion-Penagos, Rami Z Morsi, Sachin Kothari, Harsh Desai, Ammar Tarabichi, Sonam Thind, Elisheva Coleman, James R Brorson, Scott J Mendelson, Shyam Prabhakaran, Ali Mansour, Tareq Kass Hout*. *University of Chicago, Neurology, Chicago, USA*

10.1136/jnis-2023-ESMINT.162

Introduction Early mechanical thrombectomy (MT) improves functional outcomes for patients with acute LVO. It has been