scans; and 4. Motion compensation post-processing algorithm technology.

**Methods** Patients with AIS who received endovascular mechanical thrombectomy were prospectively included in this monocentric study (n=105).

Study 1: Image quality of non-contrast circular CB-CT scans were analyzed using 2 quantitative and 6 qualitative measures and were compared to CT. Study 2: 6 types of image artifacts were compared between circular and dual-axis CB-CT scans. Study 3: Clot detection, ischemic core and collateral blood supply was assessed on CB-CT Perfusion imaging and compared to baseline CT and DSA imaging. Study 4: Motion artifacts were assessed on all scans before and after post-processed using a motion artifact correction algorithm.

**Results** Study 1: Newer non-contrast CB-CT circular scans had higher mean contrast-to-noise ratio and lower mean image noise compared to older generation protocols. The largest image quality improvements included grey/white matter differentiation (59% improvement), and reduction of image noise and artefacts (63% & 50% improvement, respectively). Study 2: Dual-axis CB-CT scans had significantly improved beam hardening and cone-beam artifacts compared to circular scans. Study 3: CB-CT stroke perfusion imaging software accurately demonstrates vessel patency, ischemic core, and collateral blood supply. Study 4: 51% of all AIS CB-CT scans had motion artifacts, of which 91% improved after post-processing with our motion correction algorithm. Overall 76% of the scans were sufficient for clinical decision making prior to correction, which improved to 93% after post-processing with our algorithm.

**Conclusions** The latest generation of CB-CT scans & technology allow for exclusion of haemorrhages, stroke core definition and demonstration of brain perfusion and collaterals. These improvements suggest that CB-CT is acceptable for emergency stroke imaging assessment before mechanical thrombectomy, which may reduce door-to-groin puncture times and improve patient outcomes.

**REFERENCE**

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**0-021 MIDDLE MENINGEAL ARTERY EMBOLIZATION FOR CHRONIC SUBDURAL HEMATOMA: A NATIONAL DATABASE STUDY OF 292 PATIENTS IN THE UNITED STATES**

1A Nia*, 1R Lall, 2V Srinivasan, 1P Kan. 1University of Texas Medical Branch, Galveston, TX; 2Barrow Neurological Institute, Phoenix, AZ

**Methods** We queried all MMAE cases up to March 19th, 2021 from the TriNetX Analytics Network. We identified patients >18 years old who underwent MMAE for the treatment of cSDH. Patient demographics, baseline characteristics, comorbidities, and clinical outcomes were evaluated within 1-year post-MMAE. 1-year mortality and recurrence analyses were performed after propensity score matching to control for baseline characteristics and comorbidities.

**Results** A total 292 patients were included (mean age: 70.6 ± 13.9, 27.7% female, 71.6% White, 13.0% Black/African American, and 15.4% other). Essential hypertension (71.9%), heart disease (61.6%), type 2 diabetes mellitus (27.4%), nicotine dependence (26.0%), chronic kidney disease (19.5%), and overweight/obesity (18.2%) were among the most prevalent comorbidities. At presentation, 21.6% and 42.7% were on antplatelet and anticoagulation therapy, respectively. Outcomes within a one-year follow-up were 6.2% (or 2.74-5.82% when propensity-matched) for mortality (18 patients), 0.34-3.4% for repeat MMAE (1-10 patients), 6.5% for craniotomy/cranectomy after MMAE (19 patients), 5.1% for burr hole procedures (15 patients), and 0.35-3.5% for low vision/blindness (1-10 patients).

**Conclusion** MMAE is a safe and effective minimally invasive procedure for the treatment of cSDH. This represents the first analysis of patients undergoing MMAE for cSDH using a national database.

**Disclosures** A. Nia: None. R. Lall: None. V. Srinivasan: None. P. Kan: None.

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**0-022 WHITE MATTER SURVIVAL WITHIN AND AROUND THE HEMATOMA: QUANTIFICATION BY MRI IN PATIENTS WITH INTRACEREBRAL HEMORRHAGE**

1N Novakovic*, 1J Linzey, 2T Cheenert, 2J Gemmete, 2G Xi, 1R Keep, 1A Pandey, 2N Chaudhary. 1Neurosuregery, University of Michigan, Ann Arbor, MI; 2Radiology, University of Michigan, Ann Arbor, MI

**Introduction** White matter (WM) injury and survival after intracerebral hemorrhage (ICH) has received insufficient attention. WM disruption, surrounding the hematoma, has been