

and elevated CSF opening pressure. Venography revealed bilateral transverse sinus stenoses (right side greater than the left) and a significant pressure gradient on the right side. Dilation of the right transverse sinus with a single stent resulted in a decreased pressure gradient across the arachnoid granulation. Clinical follow-up at 2 years after treatment revealed complete resolution of her symptoms. Retrospective review of her pre-procedure MRI revealed bilateral encephaloceles into prominent arachnoid granulations. Patient B is a 45 year-old male with progressive vision loss, papilledema, and headaches refractory to medical management whom underwent stenting in a right dominant transverse sinus. Venography at the time of stenting revealed bilateral transverse sinus stenoses (left side greater than the right) with significant pressure gradients on both sides. Clinical follow-up at 4 months after treatment revealed a full recovery. Retrospective review of his pre-procedure MRI demonstrated narrowing of the left transverse sinus due to an encephalocele into an arachnoid granulation.

Conclusion Venous sinus stenting is a unique and unreported treatment approach for patients with IIH and concomitant encephaloceles. We present two cases successfully treated with venous stenting.

Disclosures G. Drocton: None. A. Copelan: None. M. Amans: None. R. Khangura: None. J. Villanueva-Meyer: None. L. Eisenmenger: None. K. Meisel: None.

E-047

VESSEL WALL IMAGING AND BRAIN ARTERIOVENOUS MALFORMATIONS: INITIAL DESCRIPTION OF ENHANCEMENT PATTERNS

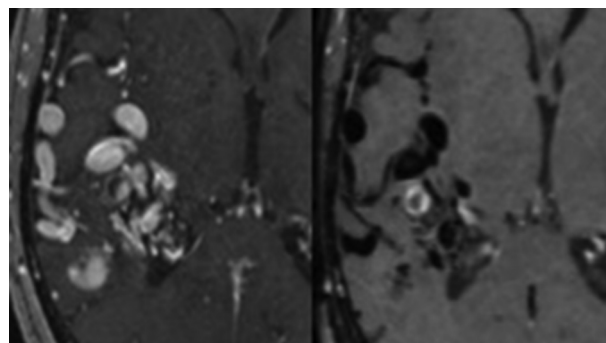
¹L Garzelli*, ¹G Boulouis, ²T Blauwblomme, ³R Levy, ³N Boddaert, ¹W Ben Hassen, ¹D Trystram, ¹C Rodriguez, ³V Dangouloff-Ross, ⁴F Nataf, ¹C Oppenheim, ³F Brunelle, ¹M Edjlali-Goujon, ¹O Naggara. ¹Neuroradiology, Sainte Anne Hospital, France; ²Neurosurgery, Necker-Enfants Malades Hospital, APHP, France; ³Pediatric Imaging, Necker-Enfants Malades Hospital, APHP, France; ⁴Neurosurgery, Sainte Anne Hospital, France

10.1136/neurintsurg-2019-SNIS.122

Purpose Usefulness of Intracranial Vessel Wall Imaging (VWI) on 3 Tesla Magnetic Resonance Imaging (3T MRI) performed on Postcontrast 3D Turbo Spin-Echo MR Imaging Sequence (CUBE, GE Healthcare, Chicago, United-States) has been demonstrated in the management of intra-cranial aneurysm. Our purpose was to describe patterns and prevalence of wall enhancement in brain arterio-venous malformations (bAVM).

Methods Pediatric and adult patients diagnosed with bAVM and referred respectively to a pediatric quaternary care center between 2016 and 2018 and to a tertiary care center between 2013 and 2018 who underwent at least one CUBE sequence (initially or during follow-up) were pooled and retrospectively analyzed. Baseline clinical, demographic and imaging data were retrospectively analyzed. Imaging were reviewed for key bAVMs angioarchitectural characteristics, i.e, nidus size, location, Spetzler Grade, venous drainage, arterial or nidal aneurysm and the presence of vessel wall enhancement (nidal, venous or arterial). Chi-squared test was used with a threshold of $p < 0.05$ to be considered significant.

Results 52 patients, 19 children and 33 adults (mean age: 31 y.o; median: 43 y.o) with 52 bAVM were included. 47% patients were untreated when the first CUBE was performed.



Abstract E-047 Figure 1

21 bAVM were ruptured, more frequently in children (12/19 versus 9/33; $p=0.01$). Parietal wall enhancement was observed in 16/21 ruptured bAVM and 27/31 unruptured bAVM. In ruptured bAVM, the site of the rupture, either venous ectasia or nidal aneurysm, demonstrated a wall enhancement in 30% of cases. In unruptured bAVM, enhancement rate did not differ between children and adults (6/7 versus 21/24).

Conclusion The prevalence of wall enhancement in bAVM vascular constituent is high, in both ruptured and unruptured lesions and was similar in adult and pediatric population. Further studies are warranted to determine the potential role of VWI in bAVM.

Disclosures L. Garzelli: None. G. Boulouis: None. T. Blauwblomme: None. R. Levy: None. N. Boddaert: None. W. Ben Hassen: None. D. Trystram: None. C. Rodriguez: None. V. Dangouloff-Ross: None. F. Nataf: None. C. Oppenheim: None. F. Brunelle: None. M. Edjlali-Goujon: None. O. Naggara: None.

E-048

REAL WORLD AVAILABILITY AND UTILIZATION OF CT PERFUSION IN ACUTE ISCHEMIC STROKE

¹A Czap*, ¹S Lee, ¹V Lopez-Rivera, ²J Grotta, ³P Chen, ³S Blackburn, ⁴L Giancardo, ¹S Savitz, ¹L McCullough, ¹A Bambhroliya, ¹F Vahidy, ¹S Sheth. ¹Neurology, University of Texas Health Science Center at Houston, Houston, TX; ²Neurology, Memorial Hermann Hospital, Houston, TX; ³Neurosurgery, University of Texas Health Science Center at Houston, Houston, TX; ⁴School of Biomedical Informatics, University of Texas Health Science Center at Houston, Houston, TX

10.1136/neurintsurg-2019-SNIS.123

Introduction With the success of endovascular stroke therapy (EST), eligible acute ischemic stroke (AIS) patients must be appropriately screened. CT Perfusion (CTP) was the predominant imaging technique used to identify candidates in the recent trials of EST. However, the real-world utilization and availability of CTP is unknown.

Methods Patients with AIS were identified by validated diagnosis codes from data on all discharges from hospitals and Emergency Departments (EDs) in Florida (FL, 2012 – 2016) and New York (NY, 2012–2014). The primary endpoint was ED imaging utilization, defined by the corresponding billing codes. CTP or EST-capable hospitals were defined as those performing at least one CTP or EST in the corresponding calendar year. Trends over time and by region were compared.

Results In the FL cohort, among 226,051 admissions for stroke at 285 hospitals, median age was 72 [IQR 61–82] and