E-117 EVALUATION OF PATIENT DEATHS AFTER MECHANICAL THROMBECTOMY – A SINGLE CENTER EXPERIENCE

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Purpose To evaluate the cause of patient deaths after mechanical thrombectomy in a large volume, single center academic institution.

Material and Methods Retrospective review of our prospectively maintained Neuro IR database and identification of all patients who underwent mechanical thrombectomy for anterior circulation strokes between January 2019 and November 2020. Patient characteristics, site of occlusion and TICI recanalization status was collected. Patients' cause of death was also recorded.

Results A total of 239 anterior circulation stroke cases were identified between January 2019 and November 2020. Site of occlusion was predominantly located at the middle cerebral artery (64.5%) followed by occlusions involving the internal carotid artery (29%). One patient presented with multiple occlusion. A total of 60 stroke patients died (25.1%). Of these 60 patients, 31 patients the cause of death was determined to have resulted from the patient's stroke. In the remaining 29 patients (48%) cause of death was due to respiratory failure, cardiac arrest, sepsis, underlying cancer or multiorgan failure/shock. The mean age of patients who died from stroke related causes was 79.3 years (range 46 to 98 years). Fourteen patients were female. In the patient group who directly died as a result of their stroke, successful TICI 2B or higher recanalization was achieved in 28/31 cases (90.3%).

Conclusion Approximately 50% of patients who died after mechanical thrombectomy died due to non-neurological causes.

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E-118 MINIMALLY INVASIVE FLUOROSCOPY-GUIDED PERCUTANEOUS BLEOMYCIN SCLEROTHERAPY FOR CRANIOFACIAL VENOLYMPHATIC MALFORMATIONS IN CHILDREN

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Purpose To evaluate the effectiveness and safety of image-guided percutaneous bleomycin sclerotherapy as a minimally invasive treatment approach for craniofacial (veno)lymphatic malformations in children and adolescents.

Material and Methods We retrospectively reviewed our prospectively maintained Neuro IR database between January 2018 and June 2020 and identified all children and adolescents (1 to 19 years) who underwent percutaneous fluoroscopy guided bleomycin sclerotherapy for craniofacial (veno)lymphatic malformations. Patient clinical and imaging follow up data was collected.

Results We identified 4 patients (2 female patients) between 20 months and 12 years old who presented with clinical and radiographic craniofacial (veno)lymphatic malformations. Two lesions were macrocystic, 1 microcystic and 1 mixed. No procedural complications ensued. On first follow up examination 2 patients report obvious decrease in size of the malformation which is confirmed with ultrasound and/or visual inspection. One patient subjectively reported minimal decrease in size with the ultrasound evaluation not showing any change from prior to the procedure. One patient who showed initial decrease in size of the lesion already underwent a second sclerotherapy session and is awaiting his next follow up appointment. The other 2 patients are scheduled to undergo their next sclerotherapy session as well. One patient did not reach the first follow up time point yet.

Abstract E-118 Figure 1

Abstract E-118 Table 1

Patient	Age	Gender	Lesion Location	Lesion Size (mm)	Lesion Characteristic	1 st Procedure Date	Follow up Imaging Date	Follow up Results	Retreatment Date
1	20 months	M	Right parotid, right submandibular and cheek	40 x 60 x 66	Mixed	10/31/19	7/15/20	Partial cure	3/29/21
2	12 years	F	Left posterior Pharynx, left tongue base and left lower lip	32 x 10 x 10	Microcystic	12/19/19	None, visual inspection	Partial cure	2/8/21
3	3 years	F	Right mandibular angle	6 x 31 x 32	Macrocystic	11/9/20	2/24/21	No change	3/29/21
4	11 years	M	Left neck	46 x 38 x 59	Macrocystic	12/28/20	Not yet performed	n/a	n/a

Conclusion Sclerotherapy should be considered in selected patients with craniofacial (veno)lymphatic malformations as it represents a safe and successful treatment option, especially if surgical excision is considered challenging, with a high risk of complication and postoperative recurrence. Patients and parents have to be aware that sclerotherapy may require several sessions to achieve results. Generally, patients and parents are satisfied with sclerotherapy treatment outcomes, specifically the cosmetic results.

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E-119 ANATOMICAL SNUFFBOX ACCESS (DISTAL RADIAL ARTERY) FOR CAROTID ARTERY STENTING

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Purpose To report the feasibility and safety of anatomical snuffbox access (distal radial artery, dRA) for carotid artery stenting (CAS).

Methods We performed a retrospective review of our prospectively maintained neurointerventional database of CAS cases between May 2019 and February 2021. All CAS cases via the anatomical snuffbox were identified. Patient demographics, clinical information, procedural and radiographic data was collected.

Results 24 CAS procedures in 22 patients via the anatomical snuffbox were identified. Patients' mean age was 69.5 years (range 53-87 years). 4 patients were female. Mean radial artery diameter was 2.1 mm (range 1.6-2.8 mm). Snuffbox access was achieved in all cases. Sixteen procedures involved the right carotid artery. In 19 cases a Carotid Wallstent (Boston Scientific) was used. In 2 cases a Viabahn stent graft (Gore) was placed and a Precise stent (Cordis) was deployed in 1 case. Conversion to femoral access was required in 2 cases (8.3%) due to persistent radial artery vasospasm resulting in patient discomfort despite multiple additional doses of intraarterial vasodilators and added intravenous sedation as well as tortuous vessel anatomy and limited support of the catheters in a type 3 aortic arch for left CAS. In our cases, dRA access was mainly obtained with a 6F Prelude Ideal hydrophilic sheath introducer (Merit Medical) and procedures were mainly performed using a Benchmark catheter (Penumbra). In 3 cases a Fubuki guide catheter (Asahi Intecc) was directly inserted into the dRA over the exchange length wire (sheath-less or bareback catheter use) after removal of the

Abstract E-119 Figure 1

sheath. In one case, a 6F Benchmark guide catheter was used to gain direct access to the dRA. We did not observe any peri- or postprocedural access site complications. No access site complications were noted. A cerebral protection device was used in all cases. There was no morbidity or mortality associated with any of the CAS interventions.

Conclusion Our preliminary experience with anatomical snuffbox access for CAS suggests this approach to be feasible and safe for patients. Preprocedural planning and technical considerations are both important for a successful procedure. Nevertheless, catheter systems and devices specifically designed for radial access are needed and will likely enable more interventionalists to safely perform such procedures via hand/wrist access.

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E-120 FIRST PASS EFFICACY OF ANTERIOR CIRCULATION THROMBECTOMY USING THE WALRUS BALLOON GUIDE CATHETER

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Purpose Evaluation of the Walrus balloon guide catheter (BGC) first pass efficacy in mechanical thrombectomy cases compared to other guide catheters.