Method From January 2011 through September 2015, a retrospective study was performed in 27 patients who had hyperacute ischemic stroke and were treated by primary intracranial stenting for refractory re-occlusion during stent-based mechanical thrombectomy. We studied radiologic appearance, clinical presentation and follow up outcomes.

Result Of the 27 patients, 11 patients (40%) showed radiologic and clinical improvement, 5 patients (18%) showed clinical improvement with in-stent stenosis, 6 patients (22%) had complication with hemorrhagic transformation and 4 patients (14%) failed recanalization or severe stenosis. In all cases, we use Solitaire FR stent. 6 patients (22%) were TICI grade III, 10 patients (37%) were TICI grade IIb, 4 patients (14%) were TICI grade IIa, and 4 patients (14%) were TICI grade I. After 3 months, 15 patients (55%) were below mRS 3 points and after 6 month, 18 patients (67%) were below mRS 3 points.

Conclusions These results indicate that primary intracranial stenting for refractory re-occlusion during stent-based mechanical thrombectomy treatment in acute ischemic stroke is effective technique. Further studies are needed to evaluate long-term occlusion and in-stent stenosis.

Disclosures S. Sheen: None. J. Shin: None.

E-026 DIAGNOSIS AND MANAGEMENT OF THORACIC AND SHOULDER ARTERIOVENOUS MALFORMATIONS

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Purpose To determine the efficacy of Endovascular Repair of Thoracic and Shoulder Arteriovenous Malformations (AVMs). Previous reports have documented the futility of nBCA and amputation in treating these lesions in this specific anatomy.

Materials and methods Twelve patients (8 female, 4 male) presented for repair of shoulder and thoracic AVMs. Three patients had extension of AVM to the supraclavicular and axillary areas. Two patients had multiple AVMs. Seven patients had previous failed therapies (embo: PVA/coils/gelfoam; surgeries: excisions/arterial bypass). All patients underwent ethanol endovascular AVM repair; four patients had additional coil embolizations (132 treatments). Patient age range 18–76 years; mean age 36.

Results Eleven patients are cured at long-term arteriographic follow-up (follow-up 22–192 months; mean follow-up: 42 months). One patient with bilateral shoulder AVM and multiple other AVMs therapy is on-going. Complications include two patients with minor superficial blisters, one patient with transient left radial nerve injury with complete recovery and one patient with clot embolus to hand, Rx with urokinase w/distal 3rd phalanx removed. Thus, major complications were 2/132 procedures, one being transient.

Conclusions A report of shoulder AVM repair in JVIR documented failure of nBCA approach even coupled with quadrant amputation whereby recurrence was universal. These authors stated that shoulder AVMs were not possible to treat. This report documents that cure of these difficult lesions is possible with ethanol endovascular approaches and direct puncture approaches. No other publications in world literature documents cure of AVMs in this anatomy.

Long-term cures are noted with the use of ethanol, and ethanol and coils to successfully treat these complex, problematic lesions. A low major complication rate is noted. This patient series finally documents a curative procedure for this daunting lesion.

Disclosures W. Yakes: None.