

and ease of technical success, ease of preparation, distal penetration, and radiopacity' and compared to Onyx using the following semi-quantitative scale: 3 = Equivalent to Onyx, 1 = Worse than Onyx, 5 = Better than Onyx.

**Results** The IMPASS liquid embolic demonstrated deep distal penetration and all targeted vessel sites were determined to be fully occluded at the post-delivery angiograms (figure 1). In the physician operator post-delivery feedback, IMPASS scored 'Better than Onyx' across all metrics (average of 4/5 for ease and timeliness of technical success, 5/5 for ease of preparation, 4/5 for distal penetration, and 4/5 for radiopacity). Details and angiograms of IMPASS deliveries and scoring data will be presented.

**Conclusions** While the sample size is limited, the results of this study suggest that the IMPASS novel liquid embolic could be well suited for MMA embolization and other non-shunting neurovascular applications. Future studies are planned.

**Disclosures** A. Siddiqui: None. R. Bjorklund: 5; C; Fluidx Medical Technology, Inc. M. Bainsmith: 5; C; Fluidx Medical Technology, Inc. J. Karz: 5; C; Fluidx Medical Technology, Inc.

#### E-202 MANAGEMENT OF TONGUE VENOUS AND LYMPHATIC MALFORMATIONS

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**Purpose** To determine the efficacy of ethanol embolization in management of tongue venous and lymphatic malformations.

**Material and Methods** 48 patients (29 females, 19 males; mean age: 38 years) presented with tongue low-flow malformations. 47 patients had undergone 61 failed previous procedures (embo, laser, surgery, steroid injection, alpha-interferon, radiation). All patients had baseline arteriograms and MRs. All patients underwent direct puncture ethanol endovascular therapy.

**Results** Of 48 patients with venous and lymphatic malformations, 37 patients had dramatic reduction and 11 patients' therapy is on-going with concurrent reductions (mean f/up: 60 months). 1 patient with AVM required additional surgery and 1 patient with mixed veno-lymphatic malformation required surgical debulking of excess tissues. Minor complications such as tongue blisters (9 instances) healed spontaneously; 3 tongue focal areas of necrosis healed spontaneously; 3 infections responded to antibiotic treatment; 1 focal tongue hemi numbness resolved. 1 patient with dense VMs had a portion of the tongue slough and the tongue healed and remolded with no treatment required.

**Conclusions** Ethanol embolotherapy is a primary and consistent form of therapy to eradicate low-flow vascular malformations of the tongue permanently at long-term follow-up. Rarely is concurrent surgery required. Ethanol sclerotherapy is a curative treatment in which recurrences do not occur and permanent ablations are the rule. Complications are minor and rare.

**Disclosures** W. Yakes: None.

#### E-203 DYNAMIC EXTRINSIC COMPRESSION OF EXTRACRANIAL CEREBRAL ARTERIES CAUSING RECURRENT STROKES

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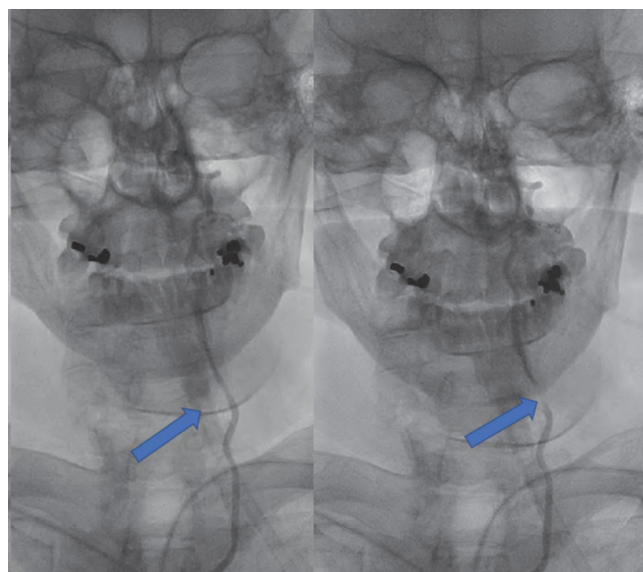
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**Introduction** A rare subset of strokes described in the literature occurs from dynamic compression of extracranial cerebral arteries. In these conditions, certain movements cause temporary mechanical occlusion of the vertebral or carotid arteries from nearby anatomical structures ultimately resulting in cerebral hypoperfusion and neurological symptoms. Here, the authors report three isolated cases of recurrent ischemic strokes from extrinsic compression of cerebral arteries, with two cases consistent with bow hunter syndrome and the third case with vascular Eagle syndrome.

**Methods** N/A

**Results** Case #1: A 60-year-old male with a history of recurrent, cryptogenic PICA infarcts presented with new cerebellar infarcts. Imaging revealed a diminutive left VA coursing outside of the transverse foramina between the posterior vertebral osteophytes and the horn of the thyroid cartilage. Dynamic cerebral angiogram revealed occlusion of the left VA at C5-C6 with neck flexion that resolved upon neck extension. After confirming sufficient contralateral circulation with the balloon occlusion test, the left VA was sacrificed with coil embolization. The patient remains asymptomatic 2 years following the procedure.

Case #2: A 39-year-old retired military pilot with a history of a right VA dissection and recurrent cryptogenic posterior circulation strokes presented with an acute midbrain infarct. Imaging revealed an acute infarct in the left inferior colliculus and chronic bilateral cerebellar infarcts. His right VA traversed between the superior horn of the thyroid cartilage and the



Abstract E-203 Figure 1