benefits, reduced healthcare costs, and patient preference. The addition of a potassium ferrate patch (StatSeal) prior to achieving access site hemostasis has been shown in other fields to reduce time to transradial band removal, and thus, recovery time. We sought to review our experience with this device in our neurovascular patient population.

Materials and Methods A retrospective single-center series review was conducted with 43 patients and 50 consecutive procedures. A transradial sheath (Terumo Glidesheath slender) was used in all procedures. Heparin 5000 units was administered as an IV bolus in all patients. Re-administration of IV heparin during procedure to maintain ACT >250 was dependent on the case. Patient hemostasis was achieved with transradial band (TR band (Terumo) for proximal radial; (Merit) PreludeSYNC Distal for 'distal' radial access) following application of StatSeal. The band was inflated to 8cc air. Half of the air was removed after 15 minutes, and the remaining air was removed after 30 minutes. The access site was monitored for another 30 minutes with a completely deflated band in place. StatSeal was removed 24 hours later.

Results In the 50 total procedures, distal (35 procedures) and proximal radial access sites(15 procedures) were utilized. 48 procedures utilized the right radial access, and 2 procedures utilized the left radial access. 33 procedures were cerebral angiograms, and 17 procedures were neurovascular interventions. Different sheaths were utilized (5F sheath (33 procedures), 6F sheath (16 procedures) and a 7F sheath (1 procedure)). No hematomas grade 2 or above reported. No access site complications were reported. 21 patients had concomitant anticoagulant treatment (DAPT (11 patients), Aspirin (5 patients), and NOAC (5 patients)).

Conclusion An accelerated deflated algorithm, with complete band deflation within 30 minutes, in conjunction with StatSeal is safe and effective to achieve rapid, patent hemostasis in neurovascular patients undergoing traditional and 'distal' transradial access. Of the 50 procedures, 35 procedures utilized the distal radial access, and 15 procedures utilized the proximal radial access. 48 procedures utilized the right radial access, and 2 procedures utilized the left radial access. 33 procedures were cerebral angiograms, and 17 procedures were neurovascular interventions. 5F sheath was used for 33 procedures, 6F sheath was used for 16 procedures, and a 7F sheath was used for 1 procedure. There were no hematomas grade 2 or above. No access site complications were reported. 21 patients had concomitant anticoagulant treatment (11 patients on DAPT, 5 patients on aspirin, and 5 patients on NOAC).

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E-137 PROPENSITY ADJUSTED COMPARATIVE ANALYSIS OF RADIAL AND FEMORAL ACCESS FOR NEUROINTERVENTIONAL TREATMENTS

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Background Transradial artery (TRA) catheterization for neuroendovascular procedures is effective and associated with less complications than transfemoral procedures. However, the majority of literature for TRA is limited to series with a high proportion of diagnostic procedures as opposed to interventional treatments. The present study compares TRA and TFA approaches for cerebrovascular intervention.

Methods All patients with an endovascular intervention from 10/1/2018 to 12/31/2019 performed at a single center were retrospectively analyzed. Patients were grouped into two cohorts: those undergoing TRA and TFA access. Primary outcomes included complications and access site cross-over. Secondary outcomes analyzed were mean fluoroscopy time and contrast amount.

Results A total of 579 neurointerventional treatment procedures were performed during the 15-month study period. 163 (28%) procedures were initially attempted via a TRA and the remaining 416 (72%) via TFA. Of the 163 initially-attempted TRA procedures, 7 (4%) crossovers (4 aneurysm embolizations, 2 thrombectomies for acute stroke, and 1 AVM embolization with 6 crossing over to TFA) vs 13 (3.1%) (5 crossing over to TRA) in the TFA procedures occurred (p=0.49). Of the 162 TRA neurointerventional procedures that were carried out accounting for crossovers, 80 (35%) were for aneurysmal embolization, 31 embolization (19%) of an AVM and/or AVF, 4 (3%) thrombectomies of an acute stroke, 9 (6%) carotid artery stenting/angioplasty, 8 (5%) embolization of a tumor, 24 (15%) middle meningeal artery embolization for chronic subdural hematomas, and 6 (4%) other neurointerventions. The TRA procedures were significantly different than the 417 TFA procedures performed, which included 143 (34%) thrombectomies for acute stroke (p<0.001). A significantly greater fluoroscopy time (39 vs 30 minutes) and total contrast (156 vs 128 mL) were observed in the TRA procedures (p<0.001 for both). TFA procedures (N=43, 10%) were associated with a significantly higher complication rate than TRA procedures (N=5, 4%) (p=0.008); however, the majority of complications were mild with only 18 (3%) major complications including 3 (2%, all IPH or CVA) in the TRA procedures and 15 (3.6%; 6 IPH/CVA, 5 vessels dissections, 3 femoral occlusions, and 1 retroperitoneal bleed) in the TFA interventions. After eliminating thrombectomy patients and performing a propensity adjustment (including age, gender, symptoms, procedure, pathology, sheath and catheter size) TRA catheterization was associated with decreased odds of a complication (OR 0.25, 95% CI: 0.085–0.72, p=0.011) and a greater contrast amount (161 vs 140 mL, p=0.007), but no significant difference in fluoroscopy time (39 vs 35 minutes, p=0.052) than TFA treatments.

Conclusion TRA access for neuroendovascular interventions can be performed successfully for a variety of procedures and for numerous pathologies, with fewer overall complications and no difference in fluoroscopy times than the traditional TFA approach.

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