

Conclusion Hybrid angiography-MRI units offer a unique capability to inform neurointerventionalists of the viability of the tissue they are attempting to salvage during complex cerebrovascular interventions. Integrating MRI into the stroke treatment angiography suite may thereby improve individual patient selection and treatment selection.

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CAROTID INTRAPLAQUE HEMORRHAGE IS INDEPENDENT OF THE DEGREE OF CAROTID ARTERY STENOSIS AND IS MORE PREVALENT IN SYMPTOMATIC VERSUS ASYMPTOMATIC PATIENTS WITH STENOSIS LESS THAN 70%: IMPLICATIONS FOR THE UTILITY OF CAROTID PLAQUE IMAGING

¹A Larson*, ²J Benson, ¹G Lanzino, ¹W Brinjikji. ¹Neurosurgery, Mayo Clinic, Rochester, MN; ²Radiology, Mayo Clinic, Rochester, MN

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Background The relationship between the prevalence of intraplaque hemorrhage and degree of carotid artery stenosis has not been well established. It is unclear whether there is a threshold of stenosis/plaque progression during which plaque hemorrhage develops within an atherosclerotic lesion.

Methods In this study, we reviewed our institutional case series of patients with carotid plaque imaging and reported on the prevalence of plaque hemorrhage based on degree of stenosis as well as symptomatic status.

Results The presence of plaque hemorrhage was independent of degree of stenosis. This was true among both asymptomatic carotid arteries ($P=0.31$) and symptomatic carotid arteries ($P=0.11$). For arteries with severe stenosis, there was no

Abstract E-165 Table 1 Degree of carotid artery stenosis and prevalence of intraplaque hemorrhage in all studied vessels

Degree of Stenosis	Prevalence of Plaque Hemorrhage (%)
<30%	34/944 (3.6)
30–49%	17/50 (34.0)
50–69%	34/103 (33.0)
70%+	43/131 (32.8)

Abstract E-165 Table 2 Degree of carotid artery stenosis and prevalence of intraplaque hemorrhage in asymptomatic versus symptomatic patients

Degree of stenosis	Prevalence of Plaque Hemorrhage		
	Asymptomatic (%)	Symptomatic (%)	P
<30%	6/504 (1.2)	17/176 (9.7)	<0.0001
30–49%	4/28 (14.3)	8/17 (47.1)	0.03
50–69%	6/38 (15.8)	23/52 (44.2)	0.009
70%+	10/40 (25.0)	22/69 (31.9)	0.52

difference in prevalence of plaque hemorrhage among symptomatic and asymptomatic patients (22/69 versus 10/40, $P=0.52$). However, for arteries with moderate stenosis (30–69%) the prevalence of plaque hemorrhage was significantly higher among symptomatic arteries versus asymptomatic (31/69 versus 10/66, $P=0.0002$). The same was true for patients with no stenosis (17/176 versus 6/504, $P<0.0001$).

Conclusions The presence of plaque hemorrhage is independent from the degree of carotid artery stenosis. Carotid Plaque Imaging for detection of plaque hemorrhage is likely most helpful in identifying symptomatic lesions among patients with <70% stenosis. Its utility for patients with severe stenosis is less certain.

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UTILIZATION OF RADIAL ACCESS IN NEUROENDOVASCULAR CASES: A SINGLE-CENTER EXPERIENCE

K Dakay*, G Kaur, J Santarelli, C Gandhi, F Al-Mufti. Neurosurgery, Westchester Medical Center, Valhalla, NY

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Introduction Transradial access is increasingly utilized as an alternative to transfemoral access for neuroendovascular procedures; the radial approach has been widely used for cardiac catheterizations and has been shown to have a lower rate of access site complications and overall complications as compared to femoral access. However, there is a steep learning curve with institution of the transradial method including changes in patient positioning, use of the Simmons catheter, and nursing familiarity with closure devices which can often impact the adoption of this method. We demonstrate our single-center experience with widespread adoption of the transradial approach.

Materials and Methods We prospectively collected data from all neuroendovascular cases from October 2019 – February 2020 including site of approach, type of procedure, and crossover rate. We dichotomized procedures into diagnostic and interventional procedures, and further divided by the type of intervention.

All interventional cases were performed via proximal radial access with a 6 French Terumo slender sheath, and either a Benchmark or Infinity guide catheter depending on the vessel of interest, patient anatomy and other features. Diagnostic cases were performed with a 5 French Terumo slender sheath and a 5 French Glide Simmons catheter; distal radial access was used in most diagnostic cases unless anatomical difficulty precluded this approach. Closure devices were used to achieve hemostasis in all patients. A spasmolytic cocktail consisting of lidocaine, nitroglycerin, and verapamil was administered in all cases; heparin was added to the cocktail unless otherwise contraindicated. For distal radial access, the Merit distal radial band was applied and kept in place with 5–10 mL of air for two hours prior to deflation. For proximal radial access, the Terumo TR band was utilized with up to 20 mL of air inflated, and kept in place for four hours prior to deflation.

Results A total of 387 cases were performed from October 2019 to January 2020, of which 94 were attempted via radial access. 4 cases were excluded due to transfemoral crossover due to patient anatomy, and 90 cases were successfully