

carotid artery, disrupting blood flow and increasing the risk of thrombus formation in young patients without known cardiovascular risk factors. The relative lack of literature regarding CWs may cause this dangerous pathology to be largely underdiagnosed. The goal of this study is to provide clarity regarding the demographic and clinical characteristics of CWs.

**Methods** A literature search using the keyword 'Carotid Web' was performed using PubMed, Google Scholar and Embase. Variables extracted included, but were not limited to, age, ethnicity, characteristics of the carotid web, symptoms, stroke score, treatment, and outcome.

**Results** After screening, 111 studies were included featuring a total of 850 patients. The mean age was 46.26 +/- 10.46 years with 60.29% of patients being female. Among patients for whom ethnicity was reported, 373/494 patients were of African American descent. Risk factors for CW were reported in 613 patients: 32.30% of patients had co-existing hypertension, 20.72% were smokers, and 8.97% had been diagnosed with hyperlipidemia. Among patients who experienced a stroke, 67.43% of the CWs were ipsilateral to the stroke. The average reported NIHSS score was 10.79 +/- 5.17. Insofar as treatment is concerned, 45 patients received stent only, 68 received endarterectomy only, 27 received thrombectomy only and 122 received medical management only, with symptom improvement rates of 100%, 100%, 96.30%, and 75.41%, respectively. The overall rate of stroke recurrence was 19.50%.

**Conclusion** This is the largest systematic review of CWs to date. This study provides novel information not only about risk factors and common treatment modalities for CWs, but also the relationship between CWs and stroke. This data may aid physicians in diagnosis of CWs in younger patients who present with stroke-like symptoms and no cardiovascular risk factors. Furthermore, medical treatment alone may not be as effective as stenting or surgical options.

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#### HIGHER INTRACRANIAL POSITIONING OF 8FR-GUIDE CATHETER IMPROVES EFFICACY OF ASPIRATION THROMBECTOMY IN LARGE VESSEL OCCLUSION STROKE

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**Introduction** Previous report from a single-center study has demonstrated that intracranial positioning of the guide catheter can improve final reperfusion rates, increase the first-pass effect, and reduce the time needed to achieve final reperfusion in patients with emergent large vessel occlusion. Positioning the guide catheter closer to the clot face can reduce the risk of clot shearing and distal embolism during mechanical thrombectomy. To further investigate the benefits of intracranial guide catheter positioning in aspiration thrombectomy procedures, we conducted a retrospective analysis from prospectively maintained databases in a multicenter setting.

**Method** To be eligible, patients had to present with intracranial ICA, M1 and M2 occlusions, be over 18 years old, and

have been treated with thrombectomy. The three participating centers were asked to include consecutive patients with data confirming guide catheter positioning during clot engagement and treated between January 2020 and January 2023. Participants were allocated into two groups: the intracranial group (n=271), in which the distal tip of the guide catheter was positioned in the petrous segment or further distal, and the control group (n=157), in which the distal tip of the guide catheter was positioned in the cervical ICA or more proximal. The primary outcomes were the rate of final excellent reperfusion (TICI 2C or better), first-pass effect (TICI 2C or better after one pass), and access to final reperfusion time. Data were presented as mean (standard deviation) or median (IQR) and percentage (counts). The unpaired t-test, Mann-Whitney U Test, and Fisher's exact test were used to compare the means, medians and proportions of the two groups, respectively. P values <0.05 were considered statistically significant.

**Results** A total of 428 patients were included in the analysis. The intracranial and control group were well matched at entry. Patients with a guide catheter location in the petrous segment or further distal had a significantly higher first pass effect than those with a more proximal location (117/271, 43.2% vs. 40/157, 25.5%, p<0.001). A guide catheter location in the petrous segment or further distal was associated with better rates of final excellent recanalization (193/271, 71.2% vs. 102/157, 65.0%, p=0.194). Furthermore, intracranial positioning of guide catheter was associated with significantly shorter times from groin puncture to final recanalization [median 21.0 (13.0-44.0) minutes vs. 35.5 (21.0-65.0) minutes, p<0.001], and a lower total number of passes [median 2 (1-3) vs. 3 (1-4) passes, p=0.013].

**Conclusion** Positioning a large bore guide catheter within the petrous segment or further distal resulted in significantly higher rates of first pass effect, lower procedural times, lower total number of passes, and better rates of excellent recanalization.

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E-095

#### SERIAL DILATION TECHNIQUE FOR ULNAR ARTERY ACCESS IN NEURO-ENDOVASCULAR PROCEDURES: TECHNICAL REPORT AND SYSTEMATIC REVIEW OF THE LITERATURE

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**Background** For rare neuro-endovascular cases in which transfemoral access is not feasible and the palmar circulation is insufficient for radial artery access, ulnar artery access may be considered.

**Materials and Methods** Prior to catheterization, nitroglycerine paste was applied along the distribution of the right ulnar artery. Heparin and verapamil were administered to the ulnar artery via the microdilator. Subsequent serial dilation to 7-French was performed. The 7-French radialsheath was advanced into the ulnar artery over the Nitrex wire. A