



Clinical Image of the Month

Carotid web: a case report

Carotid web: *a propósito de un caso*

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CASE REPORT

A 37-year-old woman with no significant medical-surgical history presented to the emergency department with a 3-hour history left hemiplegia. A brain CT scan revealed the presence of a right middle cerebral artery infarction, leading to emergency mechanical thrombectomy. During the procedure, an arteriography revealed the presence of a non-occlusive septum in the bulb segment of the right carotid artery, suggestive of a carotid web (Fig. 1). Cardiac origin was ruled out as she had sinus rhythm and an echocardiogram without abnormalities. A CT angiography was requested, confirming the diagnosis. A decision was made to perform right internal carotid endarterectomy (Fig. 2) with closure using an autologous saphenous vein patch. She was discharged after 72 hours uneventfully. At the 6-month follow-up, patency was observed, and there was no re-stenosis.



Figure 1. Arteriography image following an emergency thrombectomy procedure showing a septum in the right internal carotid artery suggestive of carotid web.

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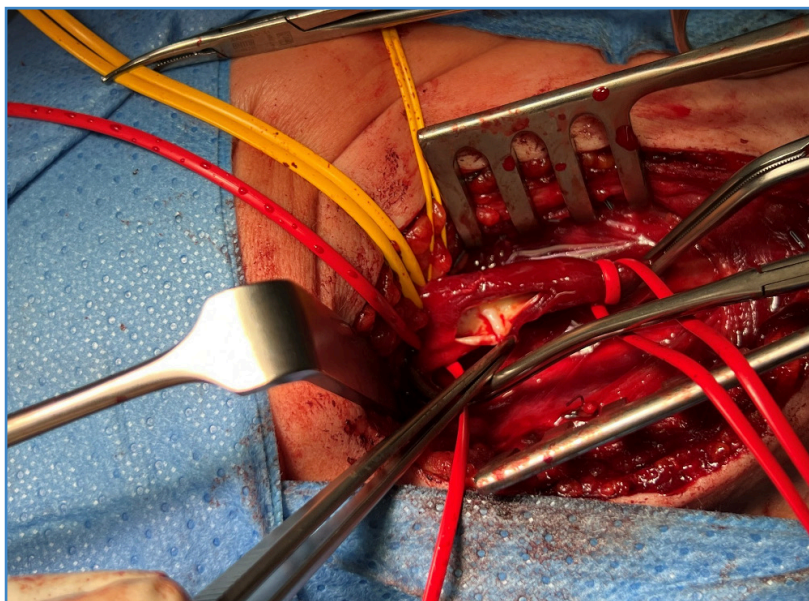


Figure 2. Intraoperative carotid web before right internal carotid endarterectomy and closure with an autologous saphenous vein patch.

DISCUSSION

Carotid web is an intimal protrusion of uncertain prevalence, predominantly seen in women, which is commonly located on the proximal posterolateral face of the internal carotid artery. It is associated with transient ischemic attacks and embolic strokes in young patients without classical cardiovascular risk factors (1). This occurs due to hemodynamic impairment of flow distal to the septum (2). Diagnosis is established through CT angiography or magnetic resonance imaging (3). Surgical treatment, through stenting or endarterectomy, has been shown to reduce the risk of recurrent ischemic episodes, which occur in 26.8 % of symptomatic patients treated exclusively with pharmacological antiplatelet, anticoagulant therapy, or a combination of both (4). Despite the lack of studies on the subject, the relevance of this disease has been increasing, influencing its recent inclusion in the latest European clinical practice guidelines, which recommend surgical treatment with stenting or endarterectomy for symptomatic patients with no other cause to explain their neurological symptoms after a thorough evaluation (level of evidence IIB, grade of recommendation C) (5). In our case, the use of an autologous vein patch for the carotid closure was chosen due to

the patient's age and the lower rate of long-term infectious complications (6).

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