

Case	(149) Carotid web: beyond of the dissection
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## CASE PRESENTATION

A 61-year-old man, with a personal history of smoking and hypertension was admitted to the emergency room for a first episode of motor aphasia and right hemiparesia.

The symptoms started at 14.30 pm and the ambulance came to hospital at 15.45 pm. The CT scan of the brain was normal, with any early signs of acute ischemia. The perfusion study presented an extensive decrease in the time-related parameters with a few decrease in flow and volumen parameters in the territory of the left CMA (cerebral medial artery) with more of 80 % of ischemic penumbra.

- the CT-angiography of the circle of Willis, there was an acute occlusion of the distal ICA ('T' occlusion). the carotid bifurcation and there was a linear, thin, smooth filling defects, located along the posterior wall of the internal carotid artery bulb, just beyond the carotid bifurcation, so the carotid web diagnosis was done.
- The trombolysis iv therapy was provided at 16.20 pm. It is used to lyse acute blood clots.
- A cerebral angiography was at 17.00h to perform an endovascular treatment of the Clot in the carotid artery stenosis by angioplasty with balloon. After the acute episode, a new angiography was performed and a stent was placement in the carotid web artery to prevent new stroke events.

## DISCUSSION

Carotid webs clinically manifest as either recurrent ischemic stroke or recurrent transient ischemic attack, especially in young patients.

A carotid web is defined as a thin, linear, membrane that extends from the posterior aspect of the internal carotid artery bulb into the lumen, located just beyond the carotid bifurcation. It is also referred to as 'intimal variant' fibromuscular dysplasia.

The main differential diagnosis is with spontaneous internal carotid artery dissection flap dissection (more distal along the internal carotid artery, has more irregular borders, and may cause increase in the arterial diameter from pseudoaneurysm) and with atherosclerotic plaque (often with calcifications).

Optimal therapy for a patient with a carotid is not yet known. Anticoagulation, antiplatelet therapy, carotid angioplasty and stenting, and endarterectomy are potential options.

## CONCLUSION

Although a carotid web it is a rare entity, it must be ruled out in cases of stroke in young people with pseudoaneurysm of dissection without other radiological signs associated and in absence of atherosclerotic.



## BIBLIOGRAPHY

- Zhang AJ, Dhruv P, Choi P, Bakker C, Koffel J, Anderson D, Kim J, Jagadeesan B, Menon BK, Streib C. A Systematic Literature Review of Patients With Carotid Web and Acute Ischemic Stroke. Stroke. 2018 Dec;49(12):2872-2876. doi: 10.1161/STROKEAHA.118.021907.
- Pacei F, Quilici L, Mullin S, Innocenti A, Valvassori L, Nardone R5, Bet L. Web of the carotid artery: An under-recognized cause of ischemic stroke. J Clin Neurosci. 2018 Apr;50:122-123. doi: 10.1016/j.jocn.2018.01.059. Epub 2018 Feb 7