Carotid "web-like" stenosis as a complication of endarterectomy

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Introduction: Carotid endarterectomy is the treatment of choice for extracranial carotid atherosclerotic disease. However, there is an associated potential for restenosis, which implies increased risk of stroke. The main pathogenesis is still unclear, but two main mechanisms are proposed: intimal hyperplasia and smooth muscle cell growth (early stage) and atherosclerotic process (later stage). Case Report: We report a case of an 80 year-old man with multiple vascular risk factors and a left endarterectomy for symptomatic stenosis. Afterwards, annual imaging screening with carotid Doppler-Ultrasound (CDU) revealed a severe bilateral carotid disease, with left residual stenosis. The patient was later re-admitted in our hospital with an acute right ischemic stroke. Diagnostic workup was performed: cranial CT scan revealed an acute right frontal ischemic lesion; CDU showed significant left internal carotid artery (ICA) stenosis and right ICA atherosclerotic occlusion; digital subtraction angiography revealed recurrence of left carotid stenosis and confirmed right occlusion. After multidisciplinary discussion, endovascular repair (angioplasty with stent insertion) of the left ICA was performed. CDU confirmed reperfusion of the artery. He was started on double anti-aggregation and high-dose statin and, during the follow-up period, there were no recurring neurologic events. Conclusion: Currently, there is no consensus regarding the best approach of carotid restenosis following carotid revascularization (surgical therapy vs carotid stenting). There is now a trend to choose endovascular approach. In our case, it was effective and without complications.