Jaw Claudication after Carotid Angioplasty and Stenting

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Purpose
Jaw claudication is classically attributed to giant cell arteritis, yet atherosclerotic disease of the external carotid artery may produce such symptoms. We describe an unusual case of jaw claudication resulting from external carotid artery stenosis exacerbated by carotid angioplasty and stenting.

Materials & Methods
A 62-year-old man with multiple vascular risk factors status post bilateral carotid endarterectomies presented with recurrent episodes of jaw claudication and subsequently experienced a minor stroke in the left middle cerebral artery distribution. Diagnostic evaluation revealed restenosis of the extracranial left internal carotid artery and the patient was scheduled for carotid angioplasty and stent placement.

Results
Angioplasty and stent placement in the left internal carotid artery was performed without complications. The proximal portion of the stent resided in the distal common carotid artery extending across the origin of a stenotic external carotid artery (Figure 1A). Three weeks following the procedure, he suffered an exacerbation of his previous episodes of jaw claudication. He experienced a severe cramping pain affecting both sides of his jaw that was triggered by chewing, without any difficulty in swallowing. There were no associated neurologic symptoms and his pain was not affected by changes in head position. These excruciatingly painful symptoms persisted for several weeks, limiting his usual eating activities and causing him to lose weight. CT angiography demonstrated prominent calcifications of bilateral external carotid arteries (Figure 1B). The highly stenotic left external carotid artery remained patent (Figure 1C), receiving blood flow through the stent interstices. After a few weeks his painful episodes abated.
Conclusion
External carotid artery stenosis due to atherosclerosis may elicit jaw claudication. Carotid angioplasty and stenting may alter the hemodynamic properties of external carotid artery branches, producing atypical, non-neurologic symptoms.

References