Pseudoaneurysm of internal carotid artery after carotid body tumor excision

Abstract

The common causes of pseudoaneurysms of internal carotid artery (ICA) in the neck are penetrating trauma, head and neck surgeries, carotid endarterectomies, infiltrating metastatic lymph nodes and neoplasms. We report a young male patient who presented with a swelling in left upper neck diagnosed as carotid body tumor with ultrasonography and magnetic resonance imaging. Subadventitial excision of the tumor was done. The patient developed dense right hemiplegia in the immediate postoperative period. Doppler study of neck revealed left ICA dissection with partial thrombosis of the lumen. Computed tomography of the brain revealed nonhemorrhagic left capsuloganglionic infarct and he was managed conservatively with heparin. Follow-up Doppler study done 2 weeks later revealed pseudoaneurysm of the ICA. Attempts to obliterate the pseudoaneurysm by interventional procedures failed due to the narrow neck of the pseudoaneurysm. Heparin was stopped and patient was maintained only on oral aspirin. Doppler study repeated 1 week later showed spontaneous thrombosis of the pseudoaneurysm with good flow in the distal ICA. To the best of our knowledge, only one case of pseudo-pseudoaneurysm complicating surgical resection of carotid body tumor has been reported so far The etiology, imaging features, and treatment options of pseudoaneurysms are discussed.