Proatlantal intersegmental artery with internal carotid artery stenosis

Figure CT and catheter-based angiograms

(A–C) CT angiograms (posterior view) show an internal carotid artery (ICA) stenosis (thick arrow) and a type 1 proatlantal intersegmental artery (arrowheads) originating from the ICA, running upward, and joining the ipsilateral vertebral artery (thin arrow). (D) Catheter-based angiogram shows an approximately 60% stenosis (thick arrow) of the right ICA.

A 56-year-old man presented with vertigo of 4 days duration. Neurologic examination was unremarkable. CT angiograms revealed a right internal carotid artery (ICA) stenosis and an ipsilateral proatlantal intersegmental artery (PIA, type 1). The PIA arose from the ICA, ran upward, then took a dorsal course, and continued as the vertebral artery, serving as the major contributor of the posterior circulation (figure, A–C). Catheter-based angiogram showed ICA stenosis of 60% (figure, D). He chose drug therapy and remained asymptomatic on follow-up. Such combination can lead to TIA of the vertebrobasilar system; treatment options include endarterectomy, stenting, balloon angioplasty, or medication.^{1,2}

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