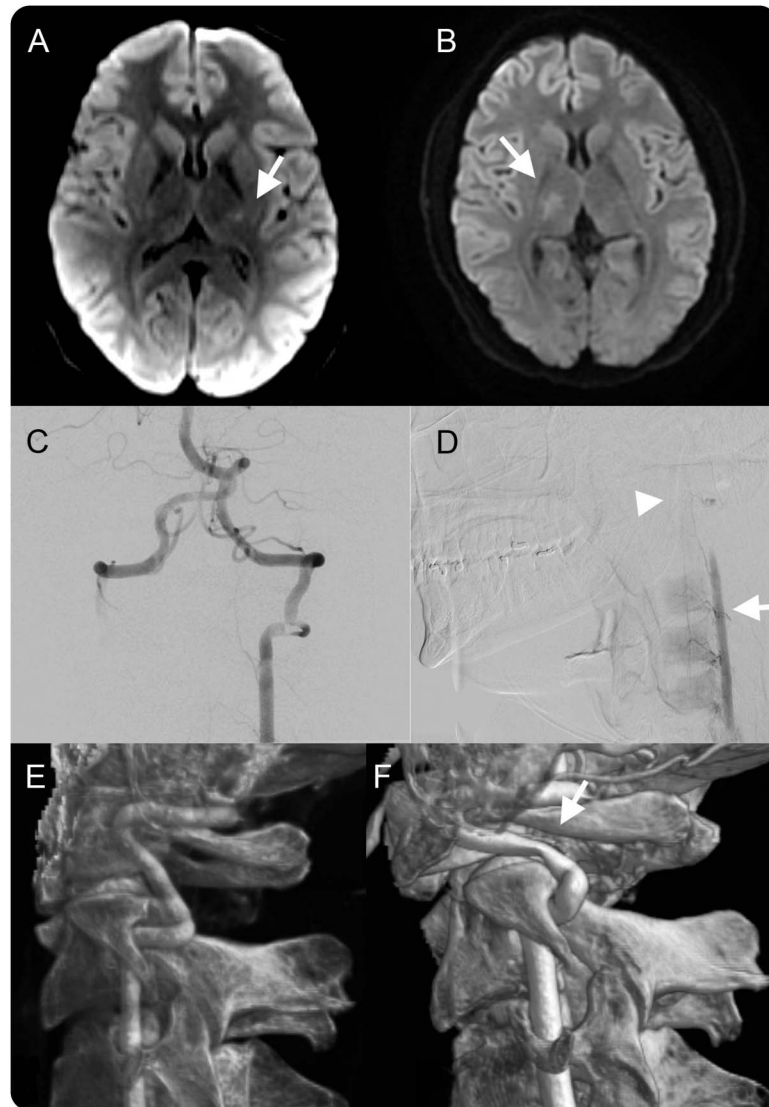


Teaching NeuroImages: Dynamic vertebral artery insufficiency

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Figure MRI and angiographic imaging of the left vertebral artery



Diffusion-weighted imaging brain MRI demonstrates left thalamic infarct (arrow, A) and right thalamic infarct at re-presentation (arrow, B). Standard angiography (C), with the head turned (D, arrowhead shows slow distal vertebral artery filling, arrow shows cervical anastomoses to vertebral body supply) and 3D reconstruction of left vertebral artery demonstrate normal vertebral artery course (E) and focal dynamic occlusion (arrow, F) over the second cervical vertebral lateral mass.

A 20-year-old healthy man presented with transient right upper monoparesis and brain MRI (figure, A) demonstrated left thalamic infarct. He presented 2 weeks later with left hemiparesis at basketball

practice and right thalamic infarct (figure, B). Stroke risk factor workup was unrevealing. Conventional angiography demonstrated normal left vertebral artery course (figure, C and E), but

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dynamic left vertebral artery occlusion during 36° rightward head turn (figure, D and F). Bow hunter syndrome, first described in an archer,¹ is eponymous for positional occlusion of the vertebral artery. This is associated with strokes from dynamic hypoperfusion. The patient remains symptom-free 1 month after microsurgical clip sacrifice of the left vertebral artery.

AUTHOR CONTRIBUTIONS

Alfred P. See: acquisition of imaging, interpretation of data, drafting of manuscript. Priyank Khandelwal: interpretation of data and critical revision of manuscript for intellectual content. Nirav Patel: interpretation of data and critical revision of manuscript for intellectual content.

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