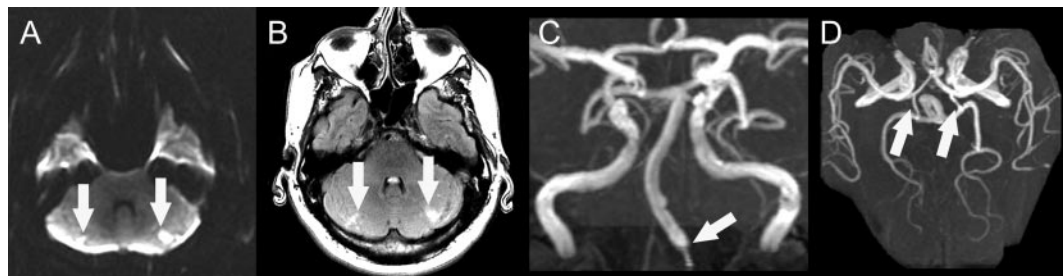


Teaching NeuroImages: Bilateral internal superior cerebellar artery watershed infarction

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Figure MRI



Diffusion-weighted imaging (A) and fluid-attenuated inversion recovery (B) show recent bilateral infarctions in the watershed zones between the medial and lateral branches of the superior cerebellar arteries. A high-grade left (predominant) vertebral artery stenosis (C) and well-developed posterior communicating arteries (D) can be seen on magnetic resonance angiography.

A 53-year-old man presented with episodes of orthostatic diplopia and gait and bilateral limb ataxia. Examination showed gait ataxia. MRI (figure) revealed bilateral watershed infarctions between medial and lateral branches of the superior cerebellar arteries (SCA), with a preocclusive left vertebral artery stenosis.^{1,2}

In bilateral vertebral artery occlusion/stenosis or unilateral vertebral hypoplasia associated with contralateral occlusion/stenosis, reversed flow from the posterior communicating arteries may provide perfusion of the basilar artery and its branches. In our patient, the internal SCA territory seemed to be the watershed area between the vertebral arteries and the superiorly located collateral arterial system (i.e., the posterior communicating arteries).

AUTHOR CONTRIBUTIONS

Dr. Renard: drafting/revising the manuscript, study concept or design, analysis or interpretation of data, acquisition of data, study supervision. Dr. Waconge: analysis or interpretation of data, acquisition of data. Dr. Castelnovo: study concept or design. Dr. Labauge: drafting/revising the manuscript, study concept or design, acquisition of data, study supervision.

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