Middle cerebral and anterior choroidal artery watershed infarction

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A 73-year-old patient (with arterial hypertension, aortic biological prosthetic valve, and atrial fibrillation as cardiovascular risk factors) presented with acute left-sided hemiplegia, hemianesthesia, and homonymous hemianopsia. Brain magnetic resonance imaging (MRI) revealed restricted diffusion (Fig. 1) in two areas corresponding to the watershed territories between the middle cerebral (MCA) and the anterior choroidal artery (AChA) territory, i.e. in the anterior part of the temporal lobe (Fig. 1a) between the medial and the lateral area (vascularised by AChA and MCA, respectively) and between the pars medialis and the pars lateralis (Fig. 1b) of the pallidum (vascularised by AChA and MCA, respectively) [1, 2]. Magnetic resonance angiography (MRA) showed carotid T-occlusion (Fig. 1e). Intravenous thrombolysis was given, followed by endovascular mechanical thrombectomy resulting in complete recanalisation and clinical recovery. Four days later, MRI showed stable diffusion-weighted imaging (DWI) abnormalities, now also seen on fluid attenuated inversion recovery (FLAIR) sequence (Fig. 1c, d). Hypoperfusion in the proper MCA and/or AChA territories was probably less profound (explaining clinical recovery after treatment and absence of MRI abnormalities) than in their watershed area (leaving FLAIR abnormalities).

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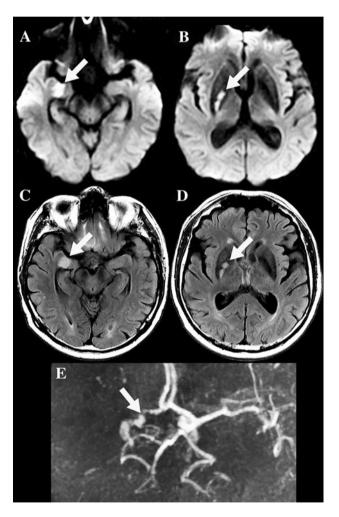


Fig. 1 DWI (**a** and **b**) and FLAIR (**c** and **d**) MRI showing hyperintensity in the anterior part of the temporal lobe between the medial and the lateral area (vascularised by AChA and MCA, respectively) and between the pars medialis and the pars lateralis of the pallidum (vascularised by AChA and MCA, respectively). MRA (**e**) showed carotid T-occlusion



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Conflict of interest We have no conflict of interest to declare.

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