Frontal Parafalcine Meningioma Presenting as Anterior Cerebral Artery Stroke

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Figure 1 MRI Findings

(A) Restricted diffusion in the left anterior cerebral artery territory as well as (B-D) an extra-axial lesion in the left frontal lobe with dural tail close to the olfactory groove and cerebral falx with contrast-enhanced T1-weighted image.

A 54-year-old woman presented with right grade 1 hemiparesis and aphasia (NIH Stroke Scale score 13) after 5 hours of initial symptoms. MRI revealed an ischemic area in left anterior cerebral artery territory and a left frontal tumor (figure 1). Endovascular reperfusion was unavailable. Etiologic investigation, which included ECG, echocardiogram, routine blood analysis, renal and thyroid function, lipidogram, HIV, hepatitis and syphilis antibodies, thrombophilia markers, MRI, and cerebral angiography (figure 2), did not reveal another alteration than the mechanical compression of the artery. After 2 weeks of clinical investigation and stabilization, complete surgical resection was performed. Language symptoms improved and the patient remains in rehabilitation. Exceptionally, meningiomas can compress major cerebral arteries, resulting in transient neurologic symptoms.¹ Even more rarely, they can present as a stroke, with an estimated incidence of 0.19%.²

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Figure 2 Digital Subtraction Angiography (DSA) Findings

(A, B) DSA shows occlusion of left anterior cerebral artery (ACA) in A2-A3 segment. (C, D) Intraoperative view shows the ACA in relation to the cerebral falx after tumor resection. (E, F) Postoperative CT with contrast demonstrates total resection of the tumor.

Disclosure

The authors report no disclosures relevant to the manuscript. Go to Neurology.org/N for full disclosures.

Appendix Authors

Name	Location	Contribution
Luciano Silveira Basso, MD	Department of Neurosurgery, Cristo Redentor Hospital, Porto Alegre, Brazil	Drafting/revision of the manuscript for content, including medical writing for content, major role in the acquisition of data, study concept or design, analysis or interpretation of data
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