

Acute Imbalance and Constitutional Syndrome: The Answer May Lie on the Front of the Head

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Ischemic stroke is currently one of the most important diseases because of its frequency, mortality, and longterm sequelae. Even though high blood pressure and other cardiovascular disorders are the most frequent etiologies, a small percentage of cases are related to uncommon diseases. We describe a patient with an ischemic stroke secondary to large vessel vasculitis.

A 79-year-old man with an unremarkable medical history except for mild hypertension presented unable to walk. The neurological examination showed dysarthria and severe right-side ataxia. A multimodal brain computed tomography (CT) scan showed an ischemic area on the right cerebellar hemisphere secondary to thrombosis of both vertebral arteries. Laboratory analyses revealed an erythrocyte sedimentation rate (ESR) of 101 mm/h, a C-reactive protein (CRP) of 6.7 mg/dl, and a mild normocytic anemia. When

questioned, he admitted malaise, fever, and weight loss for the past 2 months. He denied headache, visual defects, or any other systemic symptom. Physical examination demonstrated painless enlarged temporal arteries (Figure 1A). Giant cell arteritis (GCA) was suspected and high-dose steroid therapy was initiated (methylprednisolone 1 g/day for 3 days, followed by 60 mg/day prednisone). An F-18 fluorodeoxyglucose positron emission tomography (FDG-PET) scan showed intense FDG uptake along the vertebral arteries (Figure 1B). The temporal artery biopsy confirmed the diagnosis. After 2 weeks the patient was able to walk. ESR and CRP fell into normal ranges. He was discharged on prednisone 60 mg/day, statins, aspirin, calcium, and bisphosphonates. Two months later, a new PET/CT showed resolution of previous FDG uptake at vertebral arteries (Figure C).

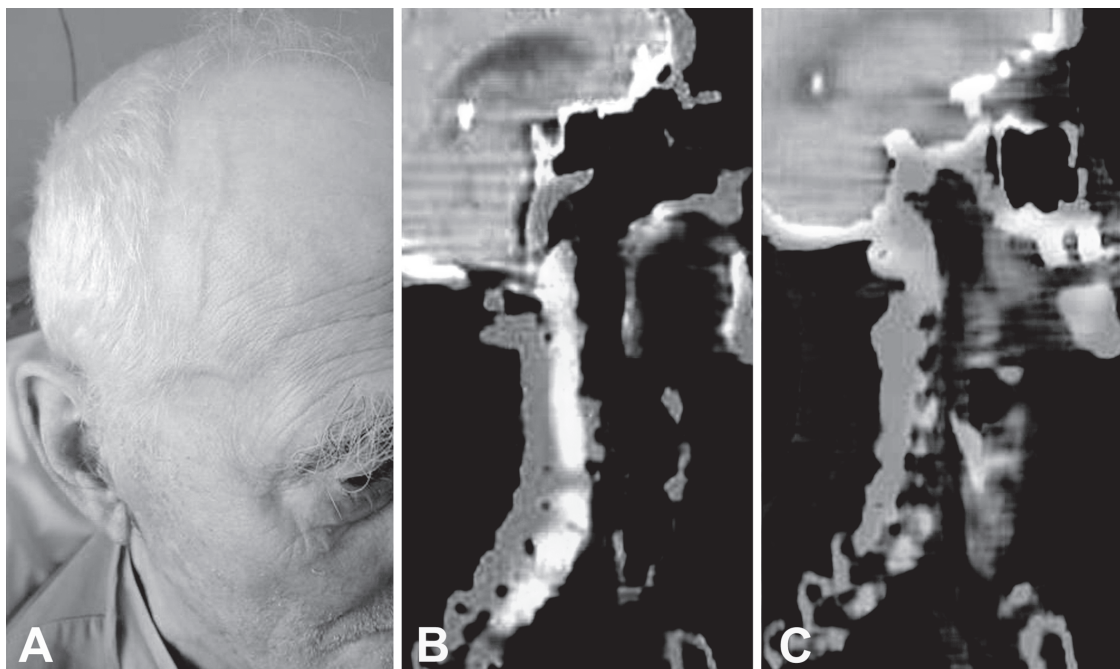


Figure 1. A. Enlarged temporal arteries. B. Axial positron emission tomography-computed tomography (PET-CT) showing intense F-18 fluorodeoxyglucose (FDG) uptake along the vertebral arteries. C. Control PET-CT showing resolution of the previous abnormal uptake at the vertebral vessels.

Ischemic stroke is a very rare manifestation of GCA (2.8% of patients). As in our patient, most series vertebral arteries are affected in > 87% of cases^{1,2,3}. As our case illustrates, owing to the increased metabolism in inflammatory disorders, FDG-PET/CT may be useful for diagnosis and followup even when temporal artery biopsy is negative^{4,5}.

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