

Neurological Manifestations in Takayasu Arteritis: An Overview

Dear Editor,

We read the article “Takayasu’s Arteritis in a Libyan Female” in the esteemed “*Ibnosina Journal of Medicine and Biomedical Sciences*” with great interest. El-Shareif reported the case of an elderly female who presented with low potassium levels and hypertension. An abdominal ultrasound showed renal size asymmetry. A magnetic resonance angiography revealed a thick abdominal aortic artery wall; the left renal artery and left common iliac artery were occluded, and the right common iliac artery and both subclavian arteries had significant stenosis. A diagnosis of Takayasu’s arteritis (TA) was made. In this way, this case was important because TA is a disease common in east Asians, but only rarely encountered in Arab populations.^[1]

TA is vasculitis of large vessels as well as giant cell arteritis, which is characterized by granulomatous inflammation that most commonly affects women of childbearing age from Asian countries. In this context, neurological manifestation can occur due to stenosis or occlusions of the central nervous system vasculature.^[2]

Here, we would like to highlight some important topics about the neurologic manifestations that together with the article of El-Shareif lead to a better comprehension of TA. First, the occurrence of stroke during the lifetime of a patient with TA is of >15%, which is at least 50% more than that of a normal person.^[3] A recent retrospective, multicentric study that aimed to evaluate the impact of stroke on prognosis in TA patients found interesting results. At the end of the follow-up, more than half of the individuals had a neurological impairment, about 30% had recurrence of stroke, and one-in-five individuals suffered from epilepsy.^[2]

The neurological manifestation in TA such as visual impairment, dizziness, stroke, or even transient ischemic attack probably results from the decrease of blood flow secondary to stenosis/occlusion lesions, thromboembolism, or hypertension. Kim *et al.* correlated TA’s neurological clinical findings with cerebral angiographic features. Their study revealed that the main cause of neurological manifestation in TA is due to stealing syndrome which shifts the blood flow. Moreover, they stated that hemodynamic assessment is useful as a method to

predict the occurrence of severe neurological complications in patients that need active interventions.^[4]

The first manifestation of stroke as the first manifestation of TA was already reported in literature. Sikaroodi *et al.* concluded in one of their cases that due to the low incidence of the disease and presentation, the diagnosis and treatment were delayed.^[5] It is worthy of mentioning that as in giant cell arteritis, the maintenance of treatment by patients with TA is important because alterations in medication doses could lead to severe complications.^[6]

Authors’ contributions

JPR carried out the literature search, review, and manuscript preparation. ALFC performed the manuscript editing, collected the clinical data, review.

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Conflicts of interest

There are no conflicts of interest.

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