Comment on: Diagnostic positron emission tomography–computed tomography in clinically elusive giant cell arteritis

Sir,

Giant cell arteritis (GCA) can be categorized into cranial GCA and large vessel giant cell arteritis (LV-GCA).[1] Cranial GCA frequently presents with headache, jaw claudication, and visual disturbances due to involvement of external carotid artery, whereas LV-GCA usually involves the aorta and its main branches and is often subclinical.[2] The frequency of inflammatory aortic involvement varies from 22% to 85% of GCA cases.[3]

Temporal artery biopsy (TAB) remains the gold standard for diagnosis of cranial GCA with hypoechoic halo on Doppler being similarly useful.[2] The LV-GCA usually spares the temporal arteries, and hence, TAB has a low diagnostic yield for it. Conversely, positron emission tomography–computed tomography (PET-CT) of aorta is a good diagnostic tool for LV-GCA, which presents with constitutional symptoms and has very low risk of ocular involvement.[4]

Mohamed *et al*. in their article on 'Diagnostic positron emission tomography–computed tomography in clinically elusive giant cell arteritis' describe the utility of PET-CT for diagnosing a patient with headaches and raised erythrocyte sedimentation rate (ESR).[5] We would like to ask the authors why PET-CT of aorta was done as the first investigation for a patient with signs of only cranial GCA. A negative aortic PET-CT cannot rule out cranial GCA. Not just the high cost and limited availability, but the low diagnostic yield of PET-CT in cranial GCA makes it an unlikely choice.

To conclude, PET-CT is of value in LV-GCA presenting with unexplained constitutional symptoms, raised inflammatory markers with negative TAB or Doppler. It is usually not recommended as first line in a patient with headaches or visual disturbances.

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Conflicts of interest

There are no conflicts of interest.

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References

1. Brack A, Martinez-Taboada V, Stanson A, Goronzy JJ, Weyand CM. Disease pattern in cranial and large-vessel giant cell arteritis. Arthritis Rheum 1999;42:311-7.
2. Tracy A, Cardy CM, Carruthers D. Large vessel vaculitides. Medicine 2018;46:112-7.
3. de Boysson H, Lambert M, Liozon E, Boutemy J, Maigné G, Ollivier Y, *et al.* Giant-cell arteritis without cranial manifestations: Working diagnosis of a distinct disease pattern. Medicine (Baltimore) 2016;95:e3818.
4. Salvarani C, Soriano A, Muratore F, Shoenfeld Y, Blockmans D. Is PET/CT essential in the diagnosis and follow-up of temporal arteritis? Autoimmun Rev 2017;16:1125-30.
5. Mohamed R, Djama D, Ayoub T. Diagnostic positron emission tomography-computed tomography in clinically elusive giant cell arteritis. Indian J Ophthalmol 2018;66:693-4.

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