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Letter to the Editor

When the Mimic Coexists with the Mimicked

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Dear Editor,

We read the article by Johannemann et al[1] with great interest. As the authors stated, Mönckeberg's sclerosis has been reported as a masquerade of temporal arteritis with a typical clinical picture in only a few reports.[1] What may be more challenging is the occasion when the 2 coexist.

A 77-year-old male presented with blurred vision in the left eye for the last few weeks. Optic disc on the left was pale and edematous on eye examination. The best uncorrected visual acuity in the right and left eyes was 6/9 and 6/21, respectively. He was reported to have bitemporal headaches as well. Both superficial temporal arteries were hard and nodular with no tenderness on palpation. Erythrocyte sedimentation rate (ESR) and serum C-reactive protein (CRP) were 80 mm/h and 45 mg/L, respectively. Complete blood count and serum biochemistry were normal. Although the walls of the superficial temporal arteries were thickened and segmentally stenotic on color Doppler ultrasonography, no characteristic halo sign could be detected. Intravenous pulse methylprednisolone 1 g/day for 3 days followed by 48 mg/day p.o. was initiated after temporal artery biopsy. Visual acuity in the left eye increased gradually to 6/15 and 6/12 at the end of the first and second weeks of corticosteroid therapy, respectively. Erythrocyte sedimentation rate and CRP returned to their normal values as well.

Histopathological examination of the temporal artery biopsy specimen revealed inflammatory infiltration of the vessel wall, intimal hyperplasia, and fragmentation of the internal elastic lamina (IEL) (Figure 1A and B). The inflammatory infiltrate was mostly lymphomonocytic with occasional multinucleated giant

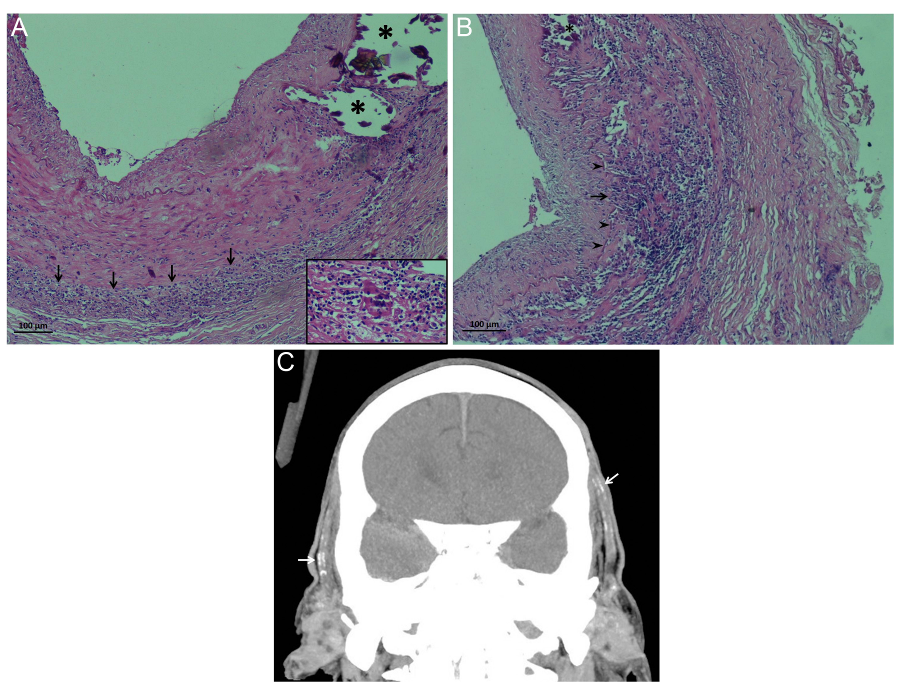

Figure 1. Inflammatory infiltrate (black arrows) composed predominantly of lymphomonocytic cells with occasional multinucleated giant cells (inner figure) and disruption of the internal elastic lamina (arrowheads) in the temporal artery wall on the background of subintimal and medial calcific deposits (asterisks) compatible with Mönckeberg's sclerosis (Hematoxylin and eosin, ×40) (A, B). Note that inflammation was not centered around the calcific deposits. Almost circumferential medial calcification of the temporal arteries resulted in railroad track appearance (white arrows) on computed tomography (C).

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cells (Figure 1A). Alongside the clinicopathological picture of temporal arteritis, the patient had histopathological and radiological features of Mönckeberg's medial calcific sclerosis (Figure 1C).

Although IEL calcifications may be an age-related phenomenon,[2] Mönckeberg's sclerosis, characterized by calcific deposits in tunica media in addition to IEL,[3] is an infrequent finding in temporal arteries.[1,4] However, it has been reported as a masquerade of temporal arteritis with a typical clinical picture in a few reports.[1] As in the reported case, both conditions may coexist as well. A diagnosis of temporal arteritis on the background of Mönckeberg's sclerosis may be challenging: (1) significantly high ESR may accompany the clinical picture suggestive of temporal arteritis in cases with medial calcific sclerosis particularly in the presence of end-stage renal disease;[5] (2) imaging may be noninformative since the arterial walls are already thickened and calcific; (3) mild-to-moderate inflammation even with multinucleated giant cells—in the form of foreign body type—reacting to calcific deposits may be observed in the vicinity of these deposits[1] along with IEL disruption[3,4] in Mönckeberg's sclerosis. Interestingly, temporal arteritis was once speculated to be caused by a foreign body reaction to IEL calcifications.[2] However, this type of reaction was demonstrable only in a minority of the patients and mostly in non-arteritic segments.[2]

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