

## Letter to the Editor



# In response to: Unusual Case of Takayasu Arteritis of the Superficial Femoral Arteries without Involvement of the Upper Extremities

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Dear Editor,

The article by Kim et al.<sup>1)</sup> entitled ‘Unusual Case of Takayasu Arteritis of the Superficial Femoral Arteries without Involvement of the Upper Extremities’ was a quite interesting read.

Takayasu arteritis as a large vessel vasculitis typically involves aorta and arch vessels. The incidence of superficial femoral artery (SFA) involvement in Takayasu's arteritis (TAK) is 8.6% as described by Dong et al.,<sup>2)</sup> however isolated involvement of medium size arteries such as the SFA is uncommon and poses a diagnostic challenge in the given setting. The authors supported their diagnosis of TAK according to the 1990 American College of Rheumatology (ACR) criteria<sup>3)</sup> based on the young age of the patient (<40 years), the presence of claudication, and angiographic abnormalities. The ACR classification criteria especially emphasizes the presence of claudication in the upper extremities, however a significance presence of isolated lower limb claudication is not well-defined. Angiographic abnormalities have been defined as narrowing or occlusion of the entire aorta, its primary branches, or large arteries in the proximal upper or lower extremities. In the given case, there is SFA involvement in the mid segment, which is distal for the expected typical involvement in TAK. Thus, the ACR classification criteria cannot be solely used to diagnose TAK in the given case. Isolated bilateral superior femoral artery involvement has been observed in a reported case of giant cell arteritis (GCA),<sup>4)</sup> however the age of presentation of the current patient is younger compared to the typical age of presentation of GCA. Isolated peripheral arterial involvement has also been reported in polyarteritis nodosa with isolated involvement of both the lower SFA without any visceral arterial involvement.<sup>5)</sup> In the current case, reaching a definitive diagnosis of vasculitis type may not be possible solely based on clinical and imaging features, and obtaining a histopathological diagnosis would be difficult.

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## The author reply: Unusual Case of Takayasu Arteritis of the Superficial Femoral Arteries without Involvement of the Upper Extremities

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We appreciate the interest and comments on our work.<sup>1)</sup> Differential diagnosis of the present case was difficult because it did not show the typical presentation of specific vasculitis. Polyarteritis nodosa (PAN) or giant cell arteritis (GCA) could present with bilateral superficial femoral artery (SFA) involvement, as noted; however, the most appropriate diagnosis was Takayasu's arteritis (TAK). GCA commonly appears in elderly patients, predominantly in the carotid and vertebral artery, and typically accompanied by polymyalgia rheumatica. PAN involves medium-sized vessels, and usually exhibits visceral artery involvement; however, the present case showed hot uptake of the aorta on positron emission tomography-computed tomography. Claudication in the upper extremity in TAK is a consequence of occlusion of a major branch of the aorta, such as the subclavian arteries. In the present case, occlusion occurred in the SFA; therefore, claudication of the lower extremity was a natural consequence. As nomenclature system of vasculitis followed the 2012 Revised International Chapel Hill Consensus Conference Nomenclature of Vasculitides,<sup>2)</sup> there could be lack of diagnostic tool for various vasculitis. Therefore, the present situation did not fit the accepted diagnostic definition or classification system for vasculitis. Further biochemical laboratory testing (including autoantibodies) or special immunohistochemical staining on biopsy may increase diagnostic accuracy for vasculitis.

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The authors have no financial conflicts of interest.

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