Comment on: Imaging is the major determinant in the assessment of disease activity in Takayasu's arteritis

by Kenar *et al*.

Sirs,

We read with interest the article by Kenar *et al*. (1) and we agree with the authors on the relevant issue of Takayasu's arteritis (TAK) activity assessment since there is no effective outcome measure reflecting the ongoing arterial wall inflammation. Vascular imaging is essential in the diagnosis and monitoring of disease activity in TAK, but the issues of its modality and utility remain controversial. As highlighted by the Authors, we need useful and practice TAK biomarkers activity, due to the absence of clinical, laboratory or imaging gold standards of disease activity. Indeed, vessel biopsies are seldom available in current clinical practice and not all TAK patients with systemic inflammatory flares develop anatomical progression of the vascular involvement. The criteria of the National Institutes of Health (NIH) for active disease (systemic features, elevated erythrocyte sedimentation rate or C-reactive protein level, features of vascular ischaemia or inflammation, and angiographic changes) have been used for evaluating TAK activity but do not accurately reflect the progression of vascular inflammation. Frequently, the clinical findings do not correlate with acute-phase reactants, the histological findings of the identified lesions are not available, and radiology studies are harder to use in the follow-up. Therefore, these criteria could not identify smoldering vessel inflammation. The potential risk of conventional angiography suggests the use of different imaging modalities.

Digital subtraction angiography (DSA) has only therapeutic role (endovascular therapy is mainly suitable for the treatment of TAK lesions, especially of aorta and supra-aortic branches, coronary and renal arteries). CTA and MRA show similar findings. In the experience of Yamada in 20 patients with TAK, MRA could find stenosis, dilatation and other aortic lesions; these MRA findings were confirmed by CTA.(2) As reported by Kenar *et al*. (1), according The European League Against Rheumatism (EULAR) regarding the use of imaging in patients suspected for TAK, MRI should be used as the first imaging test to investigate mural inflammation and/or luminal changes.

Also, in our experience (Fig. 1), MRI/MRA have been used for evaluating deeper vessels inflammation, thickness and oedema of arterial wall as disease activity indicator.

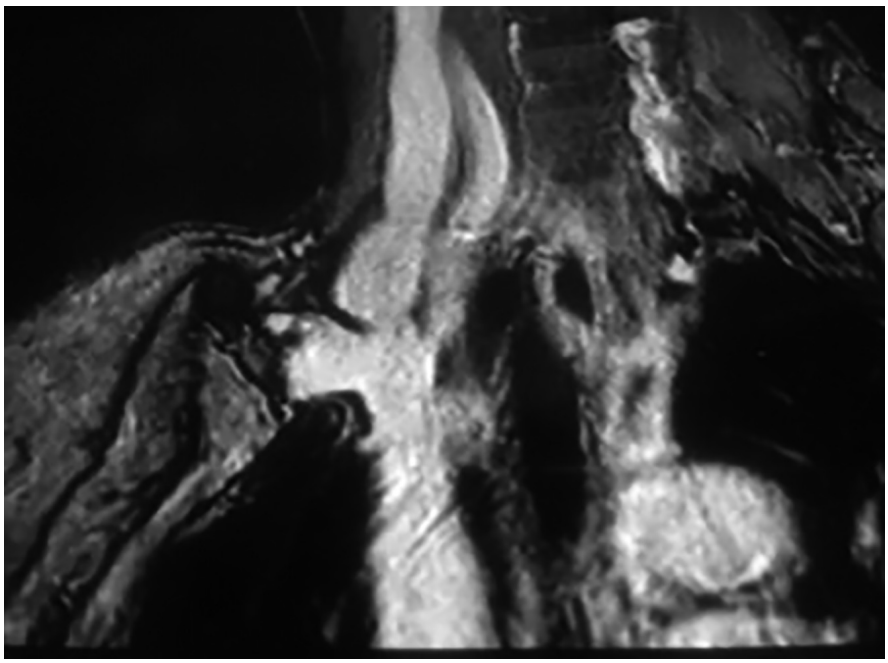

Fig. 1. Contrast-enhanced MR-angiography: mural oedema of the left proximal subclavian artery wall.

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