Case description: A 65-year-old female developed pains affecting the shoulder and forearms over a period of weeks. She additionally noted pins and needles of the affected limbs. Symptoms were worse with use and consistent with claudication. She denied systemic symptoms, headache, visual changes or early morning stiffness.

She was referred to the emergency department for assessment. Blood pressure could not be obtained and radial pulses were absent. She was subsequently arranged for further investigation via the vascular team. CT angiogram of the upper limbs demonstrated diffuse significant subclavian and axillary artery stenoses bilaterally with appearances deemed suggestive of underlying vasculitis.

She was referred for rheumatological assessment. CRP was 50 and MRA aorta confirmed findings identified on CT scan. Prednisolone was initiated at a dose of 60mg daily for 4 weeks, and was subsequently decreased at an initial rate of 10mg every 2 weeks. Methotrexate was started at a dose of 15mg weekly.

Inflammatory markers were noted to improve and CRP decreased to normal range. Despite this, although her paraesthesia resolved, she reported only a modest improvement of her upper limb claudication symptoms. Blood tests were monitored, however shortly after starting methotrexate, ALT significantly increased to 1002 IU/L. Autoimmune and viral hepatitis screen returned negative, US abdomen was suggestive of fatty liver changes but was otherwise unremarkable. Rise in ALT was attributed to methotrexate use and this was stopped, and levels improved. Mycophenolate was thus introduced as an alternative at a dose of 1g BD, but unfortunately resulted in recurrence of raised ALT.

At present, she is being managed with prednisolone alone, of which is slowly being reduced. Her case is being additionally reviewed at our local vasculitis centre based at Hammersmith Hospital for consideration of tocilizumab should there be difficulties on steroid reduction.

Discussion: Takayasu arteritis is a rare systemic large vessel vasculitis. Incidence is 1-2 per million annually with a female preponderance of 80-90%. Based on ACR classification criteria, the above patient would meet the diagnosis of this condition. Takayasu arteritis would normally be expected for those aged <40 years and has a median onset of 25-30 years. Due to her age, the diagnosis of large vessel vasculitis would be therefore be more consistent with LV-GCA, primarily in the absence of cranial features. Aorta and branch involvement can occur in up to 15% of GCA cases. Histologically, both GCA and Takayasu arteritis share similar findings and cannot be relied upon for diagnostic differentiation. Due to overlap of features, formal diagnostic labelling can be difficult in cases such as the one described.

In regards to the management of her case, the general principle was taken of initial high dose prednisolone which has been gradually reduced. Introduction of DMARD therapy was implemented early which would be more typical for Takayasu arteritis rather than GCA. Unfortunately due to deranged ALT attributed initially to methotrexate, and subsequently mycophenolate, she is not currently on any steroid sparing treatment. Studies have demonstrated efficacy of IL-6 inhibition in managing large vessel vasculitis and as mentioned, her case is being reviewed with our local vasculitis centre for consideration of tocilizumab should there be difficulties on prednisolone weaning.

Although CRP is now within normal range with treatment, our patient has ongoing claudication symptoms of the upper limbs. It is felt that this is likely due to residual vascular stenotic changes rather than current active vasculitis. As such, following stabilisation of her condition, consideration would be made for vascular surgical intervention in future.

Key learning points: Diagnosis of Takayasu versus giant cell arteritis can present a diagnostic challenge in some older patients due to overlap of typical features. The underlying process of large vessel vasculitis and shared components in both these conditions suggest they are within the same spectrum of disease. We discussed our management approach of high dose prednisolone which would be typically utilised in either diagnosis.

In our case, due to drug induced hepatitis from methotrexate and subsequent mycophenolate, current management is with prednisolone alone. In regards to long term steroid sparing therapy, other options including IL-6 inhibition is being considered pending response to current treatment. Vascular surgical intervention for residual stenoses will also be reviewed following stabilisation of underlying inflammation.

Conflicts of interest: The authors have declared no conflicts of interest.