

Letter to the Editor Regarding “Ulnar Neuropathy Caused by a Muscular Arcade of Struthers”



LETTER:

We recently reported a patient with ulnar neuropathy caused by a muscular arcade of Struthers (MAS).¹ The MAS was detected preoperatively with ultrasound (US). In this article we mentioned that the tendinous arcade of Struthers (TAS) is probably frequently missed, because it is more difficult to detect with US compared with the muscular variant. After publication of this case, we detected TAS in an 88-year-old male patient with severe symptoms of left ulnar neuropathy. Preoperative US showed an enlarged ulnar nerve, with a cross-sectional area of 36.2 mm², 5 cm proximal to the medial epicondyle (Figure 1A), with clear constriction at the site of compression (see Figure 1B) and hypervascularization of the nerve proximal to the site of compression (see Figure 1C). During surgery the TAS could easily be detected proximal to the cubital tunnel (Figure 2A) and was incised in a proximal direction (see Figure 2B). After decompression the ulnar nerve clearly had the same hourglass shape as detected on preoperative US (respectively, Figure 2C and Figure 1B). Six

weeks postoperatively, patient had already experienced improved strength of his left hand.

In our opinion this case of a TAS is a nice addition to our previously reported case of ulnar neuropathy caused by a MAS. The tendinous arcade itself may be difficult to detect preoperatively with US, but as our case shows, other signs such as enlarged total surface area proximal to the site of compression, an hourglass shape in the longitudinal plane, and hypervascularization on color mode can point to potential compression of the ulnar nerve by a TAS.

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REFERENCE

1. de Ruiter GCW, de Jonge JGH, Vlak MHM, van Loon-Felter AE. Ulnar neuropathy caused by muscular arcade of struthers. *World Neurosurg.* 2020;142:128-130.

