ACCESORY DEEP PERONEAL NERVE AS INCIDENTAL FINDING: CASE REPORT

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Introduction

The accessory deep peroneal nerve is a frequent anatomical variant derived from the superficial peroneal nerve, which provides partial or complete motor innervation to the Extensor Digitorum Brevis and sensitive innervation to the ankle, its presence has great importance clinic, electrodiagnostic and surgical.

Patient Information and Clinical Findings

Male in the fourth decade of life with nonspecific pain in the left foot, accentuated mainly in hallux and lateral to the insertion of the Achilles tendon. In physical examination no motor deficit with hyperalgesia of the areas described was found. He was referred to the electrodiagnostic laboratory with suspected peripheral nerve injury, where the presence of a deep accessory peroneal nerve was reported as an incidental finding, which was confirmed with high-frequency ultrasound. The patient received conservative management by Orthopedics with resolution of the condition after 2 weeks.

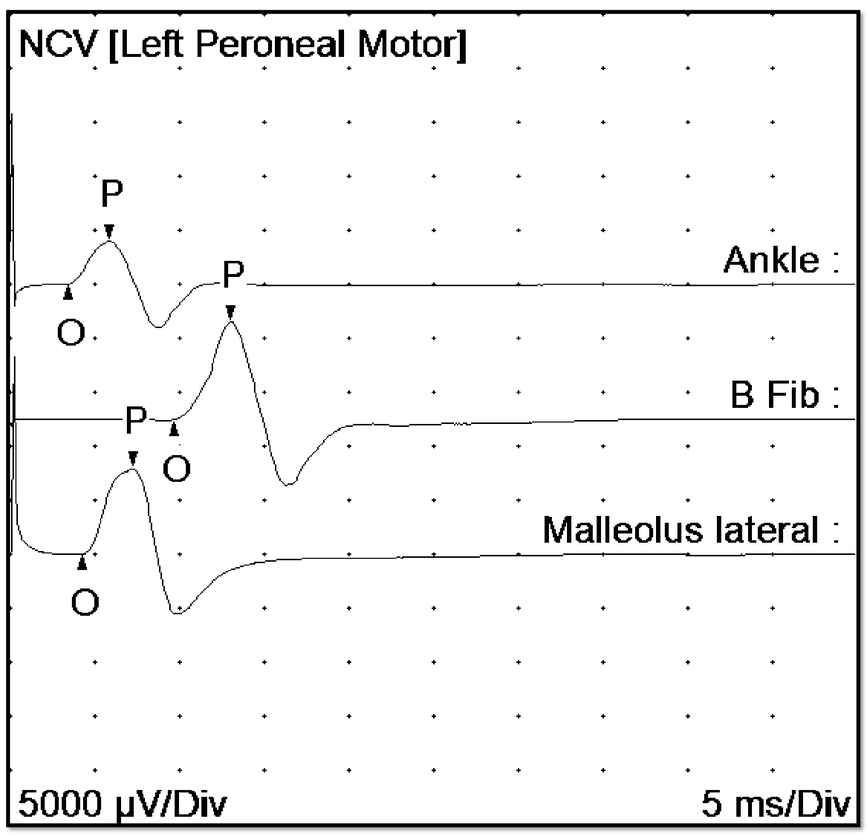

Figure 1. Motor neuroconduction of the left peroneal nerve. It notes the decrease in the amplitude of the distal stimulus with respect to the proximal, and the evidence of a reproducible response when it is stimulated the lateral malleolus.

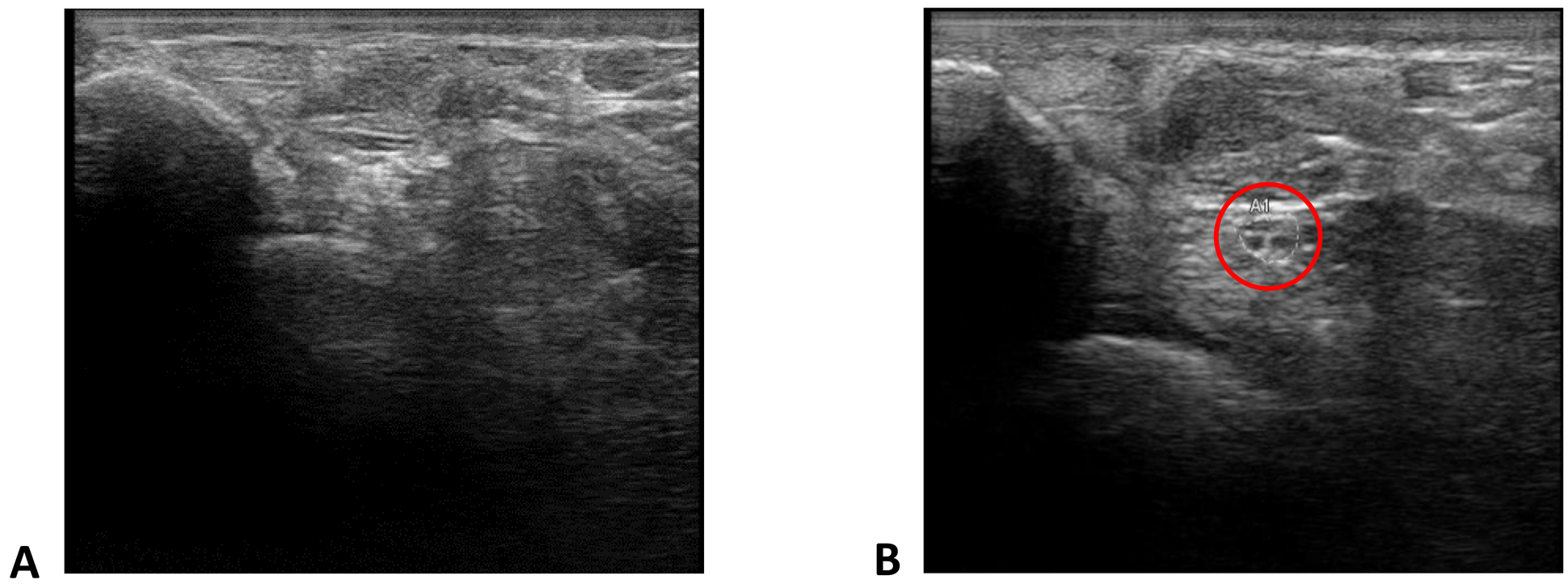

Figure 2. A. High-frequency ultrasonography of the right lateral malleolus, it notes the absence of the accessory deep peroneal nerve (ADPN). B. High-frequency ultrasonography in the left lateral malleolus, with the presence of the ADPN.

Discussion and Conclusion

A description of this anatomical variant will allow physiatrist to avoid confusion during the development of electrophysiological studies, where he can rely on ultrasonography as a clinical tool and in some cases therapeutic. Thus, after identifying this variation, surgical specialist can be alerted and to prevent an iatrogenic nerve injury.

Becciolini, M., Pivec, C., & Riegler, G. (2021). Ultrasound Imaging of the Deep Peroneal Nerve. Journal of ultrasound in medicine : official journal of the American Institute of Ultrasound in Medicine, 40(4), 821–838.