Chronic carpal tunnel syndrome due to a posttraumatic aneurysm. A rare case.

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Objective: Carpal tunnel syndrome (CTS) is the most common entrapment neuropathy. Etiologies can be numerous but rarely a vascular cause is referred in medical literature. We present a case of chronic CTS due to a post traumatic aneurysm of the superior palmar arc.

Methods: A 63 years old woman was referred to our clinic for further evaluation of a large mass at the center of her left palm, with simultaneous symptoms of median nerve entrapment. Her medical history was free of chronic diseases. She reported a fall from a ladder two years before presentation, when a large hematoma covered most of the palmar area. Tinel sign was positive for carpal tunnel syndrome, as well as the neurophysiologic studies.

Under brachial plexus anesthesia and tourniquet, a z-plasty incision extending from the carpal tunnel area to the distal transverse palmar line revealed a large, dark red mass. The median nerve was decompressed at the carpal tunnel. After careful dissection and identification of the palmar arc the mass was removed en bloc. No digital blood insufficiency was documented intraoperatively. The wound was closed and a short palmar plaster cast was used for rest.

Results: The plaster cast was removed after two weeks. The histopathology of the specimen revealed organizing and recanalizing thrombi, consisting of anastomosing channels, leading to aneurysmal type dilatation of the vessel lumen. Relief of symptoms continued progressively during one year follow up.

Discussion: An aneurysm of the superior palmar arc is an extremely rare cause of CTS. A careful preoperative examination, followed by accuracy in surgical resection will provide a postoperative normal digital blood circulation.