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Case Study

Endoscopic carpal tunnel release with a transligamentous branch

Patient History

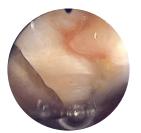
The patient is an 80 year old right handed female who presented with a long-standing history of bilateral carpal tunnel syndrome. She did have a EMG and a conduction study in the past which showed moderate to severe carpal tunnel syndrome on the right side but no surgery at the time. As symptoms progressed, a new EMG was done showing severe carpal tunnel syndrome. She complained of sandpaper feeling in her fingers and has a history of diabetes. The numbness and pain wake her up at night. When reviewing her EMG and nerve conduction study, we found that she had a distal motor latency of 6.4 and no response on the distal sensory latency. On physical examination, she was found to have thenar atrophy, a positive Durkins test, and a positive Tinel's and Phalen's test. Her 2 point discrimination was 8 mm on all the fingertips. She is indicated for a right endoscopic possible open carpal tunnel release.



Transligamentous Branch



Median Nerve



Transverse Carpal Ligament

Summary

Using the Seg-WAYTM Endoscopic Ligament Release, I placed the endoscope inside the carpal tunnel guide. The recurrent motor branch of the median nerve was crossing the field of view and had an aberrant outtake. The most common takeoff of the median nerve motor branch is extra-ligamentous. The other patterns are subligamentous and transligamentous. This variation was transligamentous. If I was using any other system, I probably would have aborted to an open procedure but the advantage of the Trice Seg-WAY system is the guide. It acts as an endoscopic retractor preventing soft tissue from falling in the field of view. The knife is secure in a separate rail from the camera and ulnar from the recurrent motor branch. I had complete view of the nerve and full confidence to cut the transverse carpal ligament keeping the nerve safe and protected. I carefully inserted the knife into the ulnar side of the guide and transected the transverse carpal ligament from proximal to distal, confirming the recurrent branch was completely intact after the release because the view was still flawless thanks to the guide.

