**Case Report**

# Use of Vivosorb as Scar Barrier during Extensor Tenolysis and Contracture Release

**Surgeon: Nicholas Pappas, MD**

## Background

The patient presented with a left wrist contracture following a previous perilunate injury. He had undergone a scapholunate ligament reconstruction, but subsequently developed severe stiffness and pain.

Despite over a year of physical therapy, he was unable to regain functional range of motion. Therefore, I recommended an extensor tenolysis with wrist contracture release and neurectomies. Preoperatively, his range of motion was limited to approximately 30 degrees of extension and flexion.

## Surgical Procedure

The patient's pre-existing dorsal scar was reopened. Significant scar tissue was immediately visualized surrounding all the extensor compartments of the wrist. An extensor tenolysis was then performed.

Next, the dorsal capsule was carefully incised, preserving the previously reconstructed scapholunate ligament. The radiocarpal joint was found to have an intact scapholunate ligament repair. The dorsal capsule was then further released, allowing the wrist to flex to 60 degrees.

Once the release was performed, attention was then shifted to the posterior and anterior interosseous nerves. He had a previous posterior interosseous nerve resection, but there was some visible remnant of nerve in the area under the 4th dorsal compartment. A revision neurectomy was performed with a 1 cm segment removed from the distal end of the posterior interosseous nerve. The anterior interosseous nerve was also visualized after an incision was made in the interosseous membrane. A 1 cm segment of anterior interosseous nerve was also resected.

## Application

In order to prevent adhesions, a Vivosorb scar barrier was placed around the posterior and interosseous nerves.

Attention then shifted to the radiocarpal joint, where a small piece of Vivosorb was placed around the dorsal aspect of the joint and tendons. This was intended to prevent future adhesions in that area. Additionally, another small segment of Vivosorb was placed on top of the extensor tendons to help prevent recurrence of adhesions between the tendon and surrounding soft tissues.

## Follow Up

At the 14 week follow-up, the patient stated he had no significant wrist discomfort. On examination, he had a healed incision around the left wrist with no signs of infection. The wrist demonstrated 60° of active extension and flexion, 90° of pronation and supination, and 20° of radial/ulnar deviation. He was overall very pleased with the result.

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