

treatment of recurrent painful neuroma

Case Courtesy of Mark S. Rekant, M.D. Philadelphia Hand to Shoulder Center

Clinical History

A 47-year-old male presented with increasing hypersensitivity after traumatic amputation of the left thumb. Three years previously, the patient had undergone an ulnar digital nerve neuroma excision with centro-central anastamosis. Now, the patient was forced to work in a modified capacity due to the pain. Upon examination, it was determined that the patient was positive for Tinel's sign over the digital ulnar nerve at the base of the left thumb stump. There was no sign of infection or damage and the patient retained wrist motion. After discussion of surgical and non-surgical options, the patient elected to proceed with an excision of the recurrent neuroma with nerve cap placement that reduces the recurrence of the painful neuroma.

Surgical Procedure

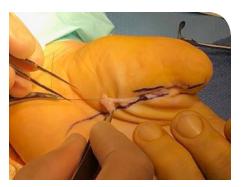
After adequate anesthesia and standard preparation, the scar from the previous amputation incision was re-incised and the skin flaps were retracted. The ulnar digital nerve neuroma was identified and resected to healthy fascicle nerve endings. In the process, a radial digital nerve neuroma was also identified and resected. Two Axoguard Nerve Caps were attached over the ulnar and radial digital nerve ends, respectively, with 8-0 nylon sutures. The capped nerves were then placed deep in the thenar muscle. Adequate hemostasis was ensured, and the wound was irrigated with saline prior to closing the skin with 4-0 nylon sutures.

Outcome

The resection of two digital nerve neuromas, one recurrent, with the Axoguard Nerve Cap was successfully performed. There was no difficulty with placement of the Axoguard Nerve Cap at the resection site of either nerve and the caps were successfully secured in the thenar muscle. At a 10-day follow up, there was no sign of infection or drainage and the sutures were removed. The patient was instructed to perform range of motion exercises. Ultimately, the patient was able to return to normal work capacity 17 days after the neuroma resection and nerve capping procedure.



Identification of recurrent neuroma.



Identification of 2nd neuroma.



Capped and buried nerve ends.

The patient was able to return to normal work capacity 17 days after the neuroma resection and nerve capping procedure.





Use Axoguard Nerve Cap, a minimally processed, extracellular matrix, to isolate terminated nerve ends and reduce symptomatic or painful neuroma formation.

ordering information

| Code | Dimensions | Approximate size |
|--------|----------------|------------------|
| AGT215 | 2 mm Nerve Cap | |
| AGT315 | 3 mm Nerve Cap | |
| AGT415 | 4 mm Nerve Cap | |

indications and trademark disclaimers

Axoguard Nerve Cap

INDICATIONS FOR USE: Axoguard Nerve Cap is indicated to protecta peripheral nerve end and to separate the nerve from the surrounding environment to reduce the development of symptomatic or painful neuroma.

Axogen Corporation

Phone 888.Axogen1 (888.296.4361) Fax 386.462.6801 customercare@axogeninc.com www.axogeninc.com

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