

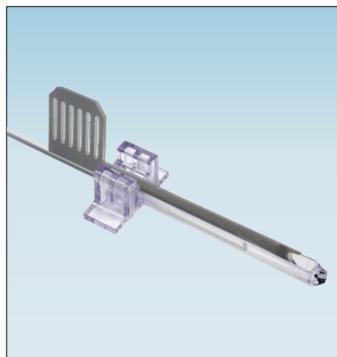


CASE STUDY

Endoscopic Decompression of a
Morton's Neuroma / Nerve Compression Syndrome
of the Third Intermetatarsal Space

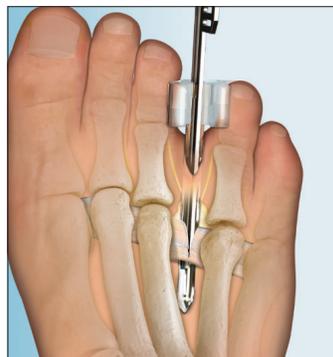


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ClearGuard LE

Endoscopic Soft Tissue Release System



Nerve Decompression



A GLOBAL EXTREMITY COMPANY

Endoscopic Decompression of a Morton's Neuroma / Nerve Compression Syndrome of the Third Intermetatarsal Space

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Introduction

A middle age female presented with symptoms of burning, radiating pain, and paresthesias which were exacerbated with shoes and exercise. The patient has an active lifestyle and was training for a competitive triathlon event.



She had increasing symptoms for two years and attempted conservative care which included, adjusting her training schedule, modifying her shoes and socks, utilizing over-the-counter anti-inflammatories, rest, and icing after exercise. On examination, there was pain on palpation of the distal third intermetatarsal space with paresthesias radiating distally into the third and fourth digits. X-rays revealed mild separation of the third and fourth digits.

Initial conservative treatment consisted of a series of three steroid injections over two months. In addition, she was provided off-loading metatarsal pads and modified orthotics, all of which gave inconsistent relief of symptoms. After several attempts of conservative care with unsatisfactory results, the recommendation was made for a surgical decompression procedure.

Procedure

The patient was admitted for outpatient surgery. While in a supine position, a one centimeter linear, web

space incision was made. This was followed by wide dissection to locate the superficial and deep transverse intermetatarsal ligament. The sequential Dilators from the ClearGuard LE™ system (**Figure 1**) were used to dilate the intermetatarsal space and the Synovial Elevator (**Figure 2**) was used to release the soft tissue. The slotted cannula was then inserted. (**Figure 3**) The cannula was dried with cotton tip applicators before inserting a 4 mm, 30-degree arthroscope. (**Figure 4**) Photographs were taken to confirm the location and pathology. The forward cutting blade was then inserted, (**Figure 5**) and direct visualization with the transparent cannula was achieved during the incising of the deep transverse intermetatarsal ligament. (**Figure 6**) The release was confirmed via arthroscopic imaging, and the blade was removed. (**Figure 7**)

Closure was performed with subcutaneous tissue and skin sutures, followed by a posterior tibial nerve block and local infiltration with Marcaine 0.5% and 1 cc of dexamethasone. A light



Figure 4



Figure 5

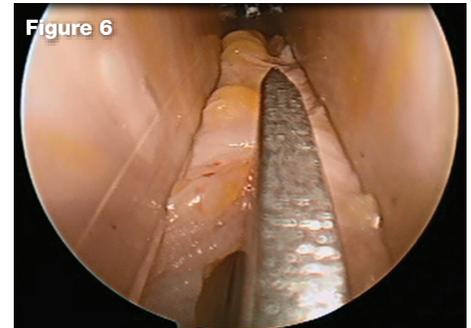


Figure 6



Figure 7

dressing was applied, and the patient was discharged with a postoperative shoe.

Post Operative Course

The patient was instructed to continue with partial weight-bearing for two days, followed by increased weight-bearing as tolerated. The sutures were removed in 10 days, and the patient returned to a soft, low-heeled shoe for three weeks. The return to higher heeled shoes and aerobic exercise began at that time. The exercises included cycling with regular tennis shoes and another non-impact aerobic exercise for approximately three weeks.

The patient was very pleased with the outcome, due to the successful relief of symptoms with a minimal scar, and a quick return to shoes and exercises.

Discussion

I began utilizing endoscopic decompression of neuromas approximately 30 years ago. As the systems have evolved over the years to provide a safer release with greater visibility, the ClearGuard LE™ System has improved upon previous systems by allowing for 360-degrees of visualization and a "stop" at the end of a cannula to prevent excessive cutting of non-pathologic tissue. The "wings" at the entry point of the cannula allows for nice retraction of the toes. The streamlined, fully sterile, and single-use instrument set is extremely efficient and allows for cost savings compared to having to process reusable instruments. The ClearGuard LE™ Endoscopic Soft Tissue Release System can also be used for other lower extremity procedures including plantar fasciotomy, gastroc recession, and tarsal tunnel release.



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