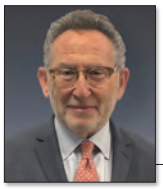

Endoscopic Decompression of a Morton's Neuroma / Nerve Compression Syndrome of the Third Intermetatarsal Space

Author: Gary Lepow, DPM, MS, FACFAS

INTRODUCTION

A middle-aged 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 inter-metatarsal 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 dressing was applied, and the patient was discharged with a post-operative 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

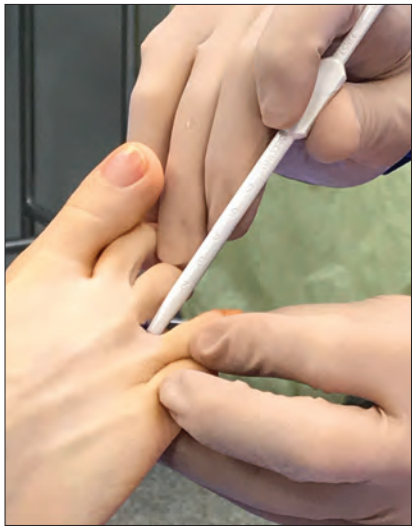

Figure 1. Dilation of intermetatarsal space

Figure 2. Release of soft tissue

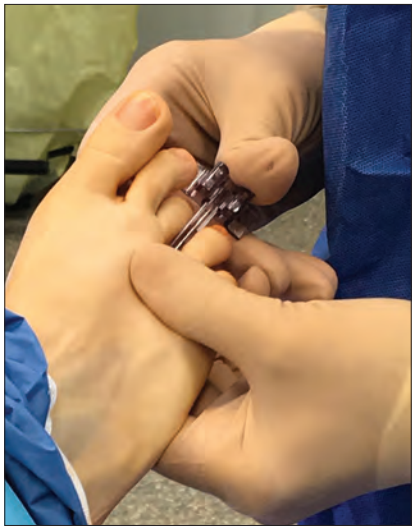

Figure 3. Cannula insertion