Treatment of Morton’s Neuroma Through a Plantar Approach: A Long Term Follow-up

Presenting:

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Interdigital neuroma is a frequent pathology that mostly affects women; its most common place is the third web space and has multiple causes. In cases where the conservative treatment does not present satisfactory results, surgical treatment via dorsal or plantar approaches should be considered.
In the last 21 years, we've been treating Morton’s neuroma through a plantar transverse approach, anterior to the weight bearing area, without the need to cut the deep transversal ligament.
We treated 160 patients (204 feet) with an average followup time of 7.6 (range, 1 to 21) years and obtained 89% of good results. These numbers are not worse than those found in the literature for patients treated by other surgical approaches.
The anterior transversal plantar approach should not “intimidate” the surgeon as it presents an index of complications very similar to the one presented in the longitudinal plantar or dorsal approach.

Background:
Originally described by Durlacher and spread by Thomas Morton, this condition is very frequent and causes pain in the forefoot due to multiple causes. The surgical treatment available nowadays vary from section of the transverse metatarsal ligament to neuroma resection.
The objective of this study is to analyze patients who undergone to neuroma resection through a plantar transversal approach anterior to the metatarsal heads and present demographic data related to this disease.

Materials and Methods:
From 1987 to 2007, 160 patients (204 feet) affected by Morton’s neuroma were evaluated clinically and by magnetic resonance imaging (MRI). The anterior transversal plantar approach was chosen for all patients. In the final evaluation, we collected data related to the quality and satisfaction of the surgical scar and of the associated pain and paresthetic sensation of the forefoot.
Results:
The average follow up time was 7.6 years, varying from 1 to 21 years. The return to regular activities prior to surgery occurred on an average of 40 days, varying from 21 to 80 days. We obtained 181 feet (89.0%) with good results; 16 feet (8.0%) with fair; and 7 feet (3.0%) considered as poor results. All patients classified as having poor results (7 feet – 3.0%) presented complaints associated with pain and paresthesia the neo-formation of the neuromas was confirmed.

Conclusion:
The results of our series, which is the largest found for this approach, and with follow up over seven years on average, allow us to affirm that this is a secure approach with a low rate of complications similar to the longitudinal, transversal plantar or dorsal approach. Therefore, our approach should be considered for the treatment of this pathology.