

# **ESWT – A Prospective Double Blind Study on Morton's Neuroma**

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## **Introduction:**

Two years ago at the Annual ISMST Meeting in Orlando, we presented a pilot study showing successful treatment of Morton's Neuroma in 27 out of 30 patients with ESWT. We have subsequently conducted a prospective placebo controlled double blind study on this treatment.

## **Purpose:**

The aim of the study was to evaluate the effect of extracorporeal shock wave therapy on painful Morton's Neuroma.

## **Patient, Material, Methods:**

25 patients with painful Morton's Neuroma of greater than 6 on a VAS that failed to respond to conservative care were eligible to participate.

Patients were anaesthetized with intravenous sedation and an infiltrative local block to the area was performed. Computer randomization then determined whether the treatment would be active or sham. For the active group treatment was performed utilizing an Ossatron by Healthtronics. The foot was treated with 2000 pulses at 21 Kv from directly inferior to the Morton's Neuroma. The sham foot received no treatment. 14 patients were randomized to the active group and 11 patients were placed in the Sham group.

Patients were evaluated at 1 week, 6 weeks and 12 weeks by a blinded investigator.

End point evaluation parameters were reduction in VAS and Roles and Maudsley quality of life assessment.

## **Results:**

The treated foot improved 70% of the time while the Sham foot improved 52% of the time.

79% of the treated feet improved by >50%, while 25% of the Sham feet improved by >50%.

75% of the treated feet attained a VAS of <3, while only 25% of the Sham group achieved <3 on a VAS. Only 8% of the treated patients had no improvement while 50% of the Sham group had no improvement.

## **Conclusion:**

ESWT can be considered a viable treatment alternative to painful Morton's Neuroma. It does not have complications associated with surgery and allows patients to ambulate immediately and return to activities of daily life without a prolonged recovery.