

ESWT in Plantar Fasciitis - 7 years of experience with two different devices

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Institutions:

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Device and producing company:

Epos Ultra – Dornier, Swiss DolorClast – EMS

Introduction:

Comparison of the efficacy of ESWT in the treatment of plantar fasciitis using two different devices at similar levels of energy and the same number of sessions.

Methods:

From January 1999 to August 2006 we performed 429 sessions of ESWT on 143 patients. We included 95 patients and excluded 48 due to the impossibility of follow up.

The electromagnetic device was used on 51 patients between January 1999 and June 2005.

The pneumatic device was used on 44 patients during the period of January 2004 to August 2006. Patient age was between 20 to 81 years; 49 female, 46 male; 50 right foot, 45 left foot, 9 bilateral. The point of application was guided with ultrasound of 7.5 MHz (Epos Ultra), and with the pneumatic device (Swiss DolorClast) we applied directly at the point of maximum pain. The energy applied was 0.22 mJ/mm² and 0.18 mJ/mm² with the Epos Ultra and DolorClast, respectively. We applied 2,000 shock waves over 3 weekly sessions with no anesthesia. The follow up was done using the VAS at 2, 6 and 12 months.

Results:

The improvement of pain and function with the electromagnetic device was 52.4 % at 2 months post-treatment, 73.2 % at 6 months post-treatment and 85.2% at 12 months post-treatment. The improvement with the pneumatic device at 2-month follow-up was 55.2 %, at 6-month follow-up was 72.9% and at 12-month follow-up was 84%.

Discussion:

Similar levels of energy and numbers of sessions demonstrated similar clinical results.

Conclusion:

The effectiveness of ESWT is similar in both devices. ESWT should be the treatment of choice before surgical intervention.