

Significance of Analgesia Induced Focused Shock Waves in Proximal Plantar Fasciitis

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Introduction:

Proximal plantar fasciitis is defined as a clinical entity characterized by pain and inflammation of the plantar fascia at the subcalcaneal area of the foot. Aines, physiotherapy, orthosis, shock waves and surgery have demonstrated produced highly variable results.

Methods:

An experimental study was performed from November 2001 to February 2007 which included 367 patients (465 feet) with proximal plantar fasciitis. The patients received focused shock waves with electro hydraulic equipment (ORTHOSPEC®); intensity: 0.16 mJ/mm², frequency: 196 waves/minute, in a single session. Clinical and ultrasound evaluation was performed, visual analogue scale (V.A.S.) and satisfaction level measured.

Beginning of Analgesia to collect question`s patient. Subsequent follow-up was performed every six weeks after treatment, with a minimum of 10 months and a maximum of 6 years. Descriptive and inferential statistical analysis was used with a difference between averages and technique of Squared Chi, significance level of 0.05.

Results:

The patients were predominantly female, mean age 53 years; beginning of analgesia 820 waves, deviation of 400 waves, total waves/session 1,620, standard deviation 730 waves. The difference between Initial and Final EAV and EAV/Level of satisfaction was significant at the level of 0.05 $p=0.0001$; good - 323 (69.5%), fair - 80 (17.2%), poor - 62 (13.3%).

Discussion:

There was a low correlation (0.02) between number of waves necessary for beginning of analgesia and time of evolution. There also was a clear dependency between level of satisfaction and number of waves at the beginning of analgesia.

Conclusion:

Application of a lower number of waves for the beginning of analgesia can play an important role in explaining the best evolution in plantar fasciopathies.