

EFFECT OF EXTRACORPOREAL SHOCK WAVE THERAPY ON DIFFERENT SITES ON PLANTAR FASCIITIS

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Background and Aims

We tried to compare the effect of applying Extracorporeal Shock Wave Therapy (ESWT) alone to the tendon insertion area on calcaneal tuberosity and together to the tender point along aponeurosis including tendon insertion site on plantar fasciitis (PF).

Methods

Plantar fascia thickness over 4 mm in calcaneal insertion area by ultrasound was diagnosed as PF. ESWT applied for 3 weeks, 1 session per week, total 2,000 shots, frequency 10, and energy level of 0.025mJ/mm². In study group, ESWT was applied 1,000 shots for calcaneal tendon insertion area and tender points along plantar fascia each. In control group, 2,000 shots for tendon insertion site only. Before and after the 3 sessions, VAS of pain at rest, at night, at pressure, at weight bearing, at first step at morning, and American Orthopedic Foot and Ankle society (AOFAS) scale were measured.

Results

Total 24 patients were recruited in the study. VAS of pain in weight bearing showed significant improvement only in study group. When compared the changes of measurement between the groups, VAS of pain in weight bearing and first step in the morning showed better outcome in study group.

Conclusion

Applying ESWT both on tender point and tendon insertion area on calcaneal tuberosity could be more useful for PF patients than applying ESWT on calcaneal tuberosity only.

Keywords: ESWT, plantar fasciitis, different sites