

# Effectiveness of Kinesio Taping and Extracorporeal Shock Wave Therapy in Plantar Fasciitis: A Systematic Review

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## ABSTRACT

**Introduction:** Plantar fasciitis impacts one's quality of life and necessitates appropriate, safe remedies. Extracorporeal Shockwave Therapy (ESWT) aids healing by lowering inflammation, regenerating tissue, and increasing blood flow. Kinesio taping (KT) provides temporary pain alleviation and support. This review evaluates the effectiveness of ESWT and KT for treating plantar fasciitis. A limited study explicitly compares their efficacy for pain and function. Randomised Controlled Trials (RCTs) included adults (18–70 years) with plantar fasciitis. Pain and foot function was assessed using Visual Analogue Scale (VAS), Foot and Ankle Outcome Score (FAOS), Foot Function Index (FFI), and Heel Tenderness Index (HTI).

**Aim:** This systematic review aims to determine the effectiveness of ESWT in comparison to KT in plantar fasciitis focussing on pain reduction and foot function improvement for the long term.

**Materials and Methods:** Database and search engines including PubMed, Cochrane Library, PEDro, and Google Scholar were searched using keywords related to "plantar fasciitis," "ESWT", "extracorporeal shockwave therapy" and "kinesio taping" from

2017 till date. PROSPERO registration with ID CRD42024594806. Data from all databases were compiled 3378 articles were found, 2856 were duplicates, 132 titles/abstracts were screened, and 11 were sought for retrieval by two researchers. Nine were screened for methodological details, participant data, outcome measures, results, and dropouts, and were reviewed, and 5 articles were included. Following PRISMA guidelines, study quality was evaluated using CONSORT, PEDro, and ROB 2.

**Result:** Five rcts (373 participants) were included. ESWT showed better long-term pain reduction (VAS,  $p<0.001$ ; FAOS,  $p=0.003$ ), while KT demonstrated improved foot function (FFI,  $p=0.027$ ,  $p=0.001$ ). One study found no significant difference.

**Conclusion:** ESWT is more effective for pain relief, while KT enhances foot function and support. Treatment is determined by the individual's needs and the severity of their ailment. Recognizing the benefits of ESWT and KT helps clinicians customize treatments for ideal outcomes.

**Keywords:** Plantar fasciitis, extracorporeal shock wave therapy, Kinesio-taping.

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