

Greetings and best wishes to all readers!!

For this issue's editorial, we visited unusual therapies in plantar fasciitis: is it worth the effort? Plantar fasciitis (PF) is every foot and ankle surgeons' unsolved nemesis, as it is a common cause of heel pain and a bread and butter diagnosis for the everyday surgeon! Traditionally it has been accepted that there is no single accepted treatment modality which will satisfy patients. The pain has been attributed to repetitive microtears of the plantar fascia at the calcaneal enthesis, aggravated by biomechanical overuse from prolonged standing or running.

Nonoperative treatment options of PF include a medley of approaches including plantar fascia and gastrosoleus muscle stretching, nonsteroidal anti-inflammatory drugs (NSAIDs), local corticosteroid (CS) injections, heel cups, arch supports, night splints, electrotherapy, lidocaine needling, prolotherapy (proliferation therapy), autologous blood injection, platelet-rich plasma (PRP) injection, and extracorporeal shock wave therapy (ESWT).

Amongst the newer modalities, ESWT is a noninvasive procedure that uses single-pulse acoustic waves generated outside the body to a specific site in the body to direct stimulation of healing, neovascularization, has direct suppressive effects on nociceptors, and also probably a hyperstimulation mechanism that would block the gate-control pain modulation have been described. Prolotherapy works by improving ligament mechanics and decreasing pain through an inflammatory mechanism. PRP is hypothesized to release high concentrations of platelet-derived growth factors that enhance tendon healing, because growth factors are released after platelets become activated to initiate the tissue healing response. However, there is scanty literature to advocate any particular method.

Recently a randomized controlled trial conducted by Ugurlar et al reviewed four treatment methods in plantar fasciitis. The first group received ESWT; the second group received prolotherapy; the third group received PRP injection; and the fourth group received a local CS injection. The study included 158 consecutive patients followed up for a period of 3 years. They concluded that once chronic plantar fasciitis had persisted, CS injection would be more effective in the first 3 months, and ESWT was a safe, effective method in the first 6 months with regard to pain. CS injection lost its effectiveness over time. The effect of prolotherapy and PRP would be seen within 3–12 months; however, at the 36-month follow-up point, there were no differences among the 4 treatments.

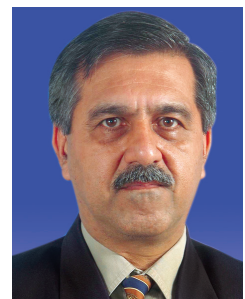
Botulinum toxin A has also been described as a treatment modality; another RCT by Ahmad et al. describes Botulinum toxin A vs saline being effective in plantar fasciitis at one year. However clear consensus still eludes us.

Another method called Low-Dye (LD) Taping first developed by Dr. Ralph Dye and has been used for treating patients with plantar fasciitis who have excessive pronation. The principle behind LD taping is to fix the subtalar joint axis, which consequently reduces excessive pronation. Short-term efficacy of LD taping has been demonstrated by Verbruggen et al. It is also advocated for those waiting for their night splints or in those who do not tolerate night splints at all. However, no large RCTs or meta-analyses are available to conclusively recommend one above the other.

In conclusion, a spine colleague remarked "I treat my PF rolling my heel over a golf ball". Better designed RCTs in a larger subset of patients are the need of the hour! Till then there is simply not enough high-quality evidence to recommend or refute any modality, even if the benefit is anecdotal. So probably individualized solutions, which may involve multiple modalities may continue to be the solution.



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