

## PRP and Plantar Fasciitis

As much as 10% of the population may suffer from plantar fasciitis. For the patient, choosing a course of treatment may seem overwhelming. Standard treatment includes activity modification, bracing and physical therapy. If this approach fails to relieve symptoms patients are typically offered a cortisone injection. Some patients may will be offered surgery. Some patients will be offered a platelet rich plasma (PRP) injection as a means of healing their ailing plantar fascia. There is recent research that strongly suggest that PRP injection is the way to go when it comes treating plantar fasciitis.

The plantar fascia is a tough band of tissue that acts as a bowstring supporting the arch of the foot. The cause of plantar fasciitis is micro trauma (little tears) to the plantar fascia. Which typically occur at its insertion point on the calcaneus (heel bone) where the soft tissue attaches to bone. Successful management of plantar fasciitis is typically achieved with the conservative therapy approaches.<sup>1</sup>

There are many conservative treatments that can provide relief from chronic severe plantar fasciitis. A recent paper examining these options suggest several therapies including rest, physical therapy, stretching, and change in footwear, arch supports, orthotics, night splints, anti-inflammatory agents, and surgery. Almost all patients respond to conservative nonsurgical therapy. <sup>2</sup>

For the subset of patients who go on to develop chronic severe plantar fasciitis and who do not wish to discuss surgery, there is hope...

In a 2015 study out of the EU researchers found “PRP is as effective as Steroid injection at achieving symptom relief at 3 and 6 months after injection, for the treatment of plantar fasciitis but unlike Steroid, its effect does not wear off with time. At 12 months, PRP is significantly more effective than Steroid, making it better and more durable than cortisone injection.”<sup>3</sup>

Doctors in Iran suggest that the injection of PRP results in slow, sustained, and significant improvement in pain severity and physical ability in patients with plantar fasciitis. This beneficial effect is appeared about 3 months after injection of PRP. Specifically, they conclude ‘Administration of PRP leads to significant improvement in pain severity and physical limitation in patients with plantar fasciitis. This healing effect may be begun at least 3 months after injection.’. With longer lasting positive benefits relative to cortisone injection. <sup>4</sup>

1. Melvin TJ, Tankersley ZJ, Qazi ZN, Jasko JJ, Odonor R, Shuler FD. Primary Care Management of Plantar Fasciitis. *W V Med J.* 2015 Nov-Dec;111(6):28-32.

2. Agyekum EK, Ma K. Heel pain: A systematic review. *Chin J Traumatol.* 2015 Jun 1;18(3):164-9.

3. Jain K, Murphy PN, Clough TM. Platelet rich plasma versus corticosteroid injection for plantar fasciitis: A comparative study. *Foot (Edinb).* 2015 Dec;25(4):235-7. doi: 10.1016/j.foot.2015.08.006. Epub 2015 Aug 22.

4 Vahdatpour B, Kianimehr L, Moradi A, Haghighat S. Beneficial effects of platelet-rich plasma on improvement of pain severity and physical disability in patients with plantar fasciitis: A randomized trial. *Advanced Biomedical Research*. 2016;5:179. doi:10.4103/2277-9175.192731.