Plantar Fasciitis: Platelet Rich Plasma vs. Corticosteroid injection

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ABSTRACT

Clinical Scenario: A common overuse injury in athletics is plantar fasciitis. Plantar fasciitis is usually treated conservatively with the use of analgesics and anti-inflammatory medications like NSAIDs. When this condition becomes chronic and conservative methods have failed; a different intervention may be indicated. Focused Clinical Question: In patients with chronic plantar fasciitis, what is the effect on platelet rich plasma injection vs. corticosteroid injection on pain? Search Strategy: Pubmed, Proquest Nursing, Cochrane Library, and CINAHL Plus databases were searched using the terms: Plantar fasciitis, platelet rich plasma injection, and corticosteroid injections. Evidence Quality Assessment: See Table 1. Each individual article was evaluated using the PEDro scale and the Oxford levels of evidence quality assessment scale. Results and Summary of Search: Four out of eight articles concluded that platelet rich plasma is equally as effective as corticosteroid injection on reducing pain in patients. The other four articles, platelet rich plasma was shown to be more effective than corticosteroid injection on reducing pain. Platelet rich plasma has a longer lasting effect than corticosteroid injection, but corticosteroid injection is less invasive and safer than platelet rich plasma injection. Platelet rich plasma proved to last up to twelve months in effectiveness on patients with chronic plantar fasciitis. Platelet rich plasma has a longer lasting effect than corticosteroid injection, but corticosteroid injection is less invasive and safer than platelet rich plasma injection. Both treatments showed improvement in patients with chronic plantar fasciitis and are effective based on the patient’s symptoms and goals from treatment. However, platelet rich plasma may prove to be superior due to longer lasting effects of the treatment. The SORT score is an A level of recommendation.

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Results and Summary of Search

Four out of eight articles concluded that platelet rich plasma is equally as effective as corticosteroid injection on reducing pain in patients. The other four articles, platelet rich plasma was shown to be more effective than corticosteroid injection on reducing pain in patients with chronic plantar fasciitis. Platelet rich plasma has a longer lasting effect than corticosteroid injection, but corticosteroid injection is less invasive and safer than platelet rich plasma injection. Both treatments showed improvement in patients with chronic plantar fasciitis and are effective based on the patient’s symptoms and goals from treatment. However, platelet rich plasma may prove to be superior due to longer lasting effects of the treatment. The SORT score is an A level of recommendation.

CLINICAL SCENARIO

Plantar fasciitis is a common overuse injury. It can be caused by a variety of mechanisms but is a repetitive use trauma to the plantar fascia. This stress can be intensified leading to plantar fasciitis with improper footwear, change in running surfaces, change in shoes, or repetitive use without rest including activities that stretch the plantar fascia like running, jumping, etc. This research is aimed to answer the question; in patients with chronic plantar fasciitis what is the effect on platelet rich plasma versus corticosteroid injection on pain? Patients must have failed at least 85% of patients that were in the article. Strengths included blinding of patients and assessors. Clinical Bottom Line: This research can be used to educate patients on possible treatments they may have to choose from if conservative treatment of plantar fasciitis fails. The failure of conservative treatment may lead to these more invasive treatments especially if pain is a factor in their performance or activity level. Depending on where an Athletic Trainer practices, state law and the supervising physician, may allow an athletic trainer to be able to perform these procedures and should know which treatment could be most effective for their patients based on their goals of treatment.

REFERENCES