

The Effectiveness of Platelet-Rich Plasma Injections in Gluteal Tendinopathy: A Randomized, Double-Blind Controlled Trial Comparing a Single Platelet-Rich Plasma Injection With a Single Corticosteroid Injection.

[Fitzpatrick J](#)^{1,2,3}, [Bulsara MK](#)⁴, [O'Donnell J](#)⁵, [McCrary PR](#)⁶, [Zheng MH](#)^{1,7}.

[Author information](#)

Abstract

BACKGROUND:

Gluteus medius/minimus tendinopathy is a common cause of lateral hip pain or greater trochanteric pain syndrome.

HYPOTHESIS:

There would be no difference in the modified Harris Hip Score (mHHS) between a single platelet-rich plasma (PRP) injection compared with a corticosteroid injection in the treatment of gluteal tendinopathy.

STUDY DESIGN:

Randomized controlled trial; Level of evidence, 1.

METHODS:

There were 228 consecutive patients referred with gluteal tendinopathy who were screened to enroll 80 participants; 148 were excluded (refusal: n = 42; previous surgery or sciatica: n = 50; osteoarthritis, n = 17; full-thickness tendon tear, n = 17; other: n = 22). Participants were randomized (1:1) to receive either a blinded glucocorticoid or PRP injection intratendinously under ultrasound guidance. A pain and functional assessment was performed using the mHHS questionnaire at 0, 2, 6, and 12 weeks and the patient acceptable symptom state (PASS) and minimal clinically important difference (MCID) at 12 weeks.

RESULTS:

Participants had a mean age of 60 years, a ratio of female to male of 9:1, and mean duration of symptoms of >14 months. Pain and function measured by the mean mHHS showed no difference at 2 weeks (corticosteroid: 66.95 ± 15.14 vs PRP: 65.23 ± 11.60) or 6 weeks (corticosteroid: 69.51 ± 14.78 vs PRP: 68.79 ± 13.33). The mean mHHS was significantly improved at 12 weeks in the PRP group (74.05 ± 13.92) compared with the corticosteroid group

(67.13 ± 16.04) (P = .048). The proportion of participants who achieved an outcome score of ≥74 at 12 weeks was 17 of 37 (45.9%) in the corticosteroid group and 25 of 39 (64.1%) in the PRP group. The proportion of participants who achieved the MCID of more than 8 points at 12 weeks was 21 of 37 (56.7%) in the corticosteroid group and 32 of 39 (82%) in the PRP group (P = .016).

CONCLUSION:

Patients with chronic gluteal tendinopathy >4 months, diagnosed with both clinical and radiological examinations, achieved greater clinical improvement at 12 weeks when treated with a single PRP injection than those treated with a single corticosteroid injection. Registration: ACTRN12613000677707 (Australian New Zealand Clinical Trials Registry).

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