

**Effectiveness and Safety of Platelet Rich Plasma injection compared
to Hyaluronic Acid injection for Treatment of Plantar Fasciitis**

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Abstract

Introduction: Plantar fasciitis (PF) is the most common cause of heel pain. Approximately 10% of people suffer from PF during their lifetime. A debate in the literature that will probably modify the treatment modalities is the research concerning the pathophysiology of plantar fasciitis

Patients and methods: The study was carried out as a single center, randomized comparative study on 60 patients with chronic plantar fasciitis not responding to conservative treatment attending to outpatient clinic in Orthopedic Department of Fayoum University Hospitals from December 2016 till August 2017. The patients were allocated randomly using a simple randomization method into two equal groups (30 patients each), group I was treated with local injection of PRP and group II was treated by hyaluronic acid injection. Patients were followed up for 3 months and were assessed clinically and pain improvement with VAS score.

Results: In the first group of patients treated with PRP injection the mean VAS score prior to treatment was 8.2, declined to 5.63 at 1 month of follow up and declined to 1.03 at 3 months follow up. VAS score declined to 87.4 % after patients being injected with PRP at 3 months of follow up. While in the other group of patients treated with hyaluronic acid injection, results of our study reported that the mean VAS score prior to treatment with hyaluronic acid was 8.03 and at 1 months post-injection mean VAS score was 7.13 and at 3 months of follow up mean VAS score was 6.93. VAS score decline to 13.2% compared to VAS prior of injection at 3 months of follow up.

Conclusions: PRP injection is recommended in patient with chronic planter fasciitis after failure conservative treatment and steroid injection.

Key Words: Platelet-rich plasma PRP, plantar fasciitis PF , hyaluronic acid HA.