

## **Background Information**

- Patient was prescribed platelet rich plasma (PRP) injection 6 weeks after onset.
- Treatment was initiated conservative.
- Multiple modes of treatment unsuccessful.

## What is PRP?

- $\bullet$
- anti-inflammatory markers. 3



### Conclusion

#### **Figure 1:** PRP injection

Retrieved from: Platelet-rich plasma rehabilitation guidelines. University of Wisconsin Health Sports *Rehabilitation,* 1-5.

#### References

- randomized trial. Advanced Biomedical Research, 5(1), 179-194.

# A Male Basketball Player with Chronic Plantar Fasciitis Treated with PRP Injection: A Case Study Foster, S.: Springfield College Athletic Training Program Springfield, Massachusetts

• A 21-year-old male Basketball player with chronic plantar fasciitis.

Patients blood is extracted and put through a centrifuge. 1 The blood plasma is removed and injected into the site of injury. 1 Blood plasma is rich in nutrients, growth factors like cytokines, and

> • Plantar fasciitis patients can expect a decrease in pain within the first month post injection.  $_1$

• Full healing effects 3 months post injection. <sub>2</sub>

• PRP is a more beneficial treatment then corticosteroids because of the decrease in tensile tissue strength and increased pain at the 6-month mark.

PRP is beneficial to aiding the healing process because of the nutrients and healing properties brought to the site of injury.

3. Yang, W., Han, Y., Cao, X., Pan, J., Zeng, L., Lin, J. & Liu, J. (2017). Platelet-rich plasma as a treatment for plantar fasciitis: A meta-analysis of randomized control trials. Wolters Kluwer Health, 96(44), 1-8.

#### **Case Presentation**

- Patient underwent multiple modes of unsuccessful treatment
- Conservative treatment initiated with immobilization in a walking boot.
- Use of rehabilitation exercises, iontophoresis with dexamethasone, hot whirlpool, and thermal ultrasound for a 6-week period after immobilization before PRP was unsuccessful in relieving pain.
- Team physician prescribed PRP injection for the plantar fascia.
- Patient did the same rehabilitation exercise protocol post injection.
- Patients pain decreased during immobilization
- First 6-weeks post injection was light ankle range of motion and arch strengthening exercises.
- After the 6-weeks of light rehabilitation and no pain, patient began a more intense treatment.
- Treatment included thermal ultrasound, dynamic fascial decompression, ankle range of motion, eccentric foot exercises, arch strengthening, balance, and soft tissue mobilization.
- Patient began sport specific motions 12 weeks post injection and remained pain free.

## **Clinical Bottom Line**

- PRP is an effective treatment for patients if conservative treatment does not reduce pain.
- For cases of plantar fasciitis that remain symptomatic with conservative treatment, PRP will aid in the decrease in symptoms.
- The rehabilitation protocol did not change before or after injection, the PRP aided in the decrease of pain and the ability to progress in rehabilitation.





<sup>1.</sup> Tiawari, M. & Bhargava, R. (2013). Platelet-rich plasma therapy: A comparative effective therapy with promising results in plantar fasciitis. *Journal of Clinical Orthopedics and Trauma, 4*(1), 31-35. 2. Vahdatpur, B., Kianimehr, L., Moradi, A. & Haghighat, S. (2016). Beneficial effects of platelet-rich plasma on improvement of pain severity and physical disability in patients with plantar fasciitis: A