PRP for Achilles Tendinopathy

23 SEP 2023 · 7 MIN READ

A guide to mid-portion and insertional Achilles tendinopathy, imaging, and PRP.

What is Achilles tendinopathy?

Achilles tendinopathy can occur in the mid-portion of the tendon or at its insertion on the heel bone. Symptoms can also come from partial tearing, paratenon disease, retrocalcaneal bursitis, Haglund-type bony impingement or an acute rupture. These are different problems and should not be grouped under one label.

What does the evidence say about PRP?

The evidence for PRP in Achilles tendinopathy needs to be interpreted carefully because **PRP is not a single, standardised treatment**. Platelet dose, injected volume, leukocyte composition, preparation method, number of treatments, anatomical targeting and rehabilitation protocols vary substantially

between studies. Comparing every treatment simply under the label “PRP” risks treating biologically different products as though they were equivalent.[1–3]

A 2024 systematic review and meta-analysis of six randomised trials involving 422 patients with chronic Achilles tendinopathy found no significant improvement in VISA-A scores or tendon thickness with PRP compared with control treatment at 3, 6 or 12 months.[1] More recent evidence syntheses have reached a similar overall conclusion: the PRP protocols studied to date have not consistently demonstrated superiority over placebo or established conservative treatment for chronic Achilles tendinopathy.[2]

However, this should not necessarily be interpreted as evidence that all PRP formulations are ineffective for Achilles tendinopathy.

An important limitation of the existing literature is biological dose. A review examining platelet dose and PRP bioformulation identified multiple Achilles studies with non-significant outcomes in which the estimated total platelet doses were approximately 0.9 to 3.1 billion platelets.[3] Contemporary reviews of PRP dosing have also highlighted that platelet dose is rarely standardised or even adequately reported in musculoskeletal trials, making it difficult to determine whether an appropriately dosed biological treatment has actually been tested.[4]

This distinction is becoming increasingly important. In other tendinopathies, there is emerging clinical evidence that PRP response may be **dose dependent**. A 2025 systematic review and meta-regression of 13 randomised trials involving 791 patients with lateral epicondylitis found a significant benefit from higher-dose PRP, while lower-dose preparations showed no advantage over comparison treatments. Platelet concentration alone explained a substantial proportion of the variation in clinical outcomes between studies.[5] This does **not prove that high-dose PRP will produce the same result in the Achilles tendon**, but it demonstrates why negative trials using relatively low-dose preparations should not automatically be extrapolated to every PRP formulation.

There is also a reasonable biological rationale for PRP in chronic tendinopathy. Platelets release a complex mixture of growth factors, cytokines and signalling molecules involved in cell recruitment, collagen and extracellular-matrix remodelling, angiogenesis and tissue repair. Laboratory and translational evidence therefore supports a potential biological role for PRP in tendon healing, although biological plausibility alone does not establish clinical efficacy.[3,6]

The most accurate interpretation of the evidence is therefore that routine low-dose or incompletely characterised PRP has not been convincingly shown to improve chronic Achilles tendinopathy, while the effectiveness of appropriately selected, adequately dosed and precisely delivered PRP remains insufficiently studied.

At MBR Health, PRP is not considered a replacement for rehabilitation. Progressive tendon remains fundamental to Achilles treatment. PRP may be considered in selected patients when the diagnosis has been confirmed, important alternative causes of heel pain have been excluded and an appropriate rehabilitation program has not produced the expected improvement.

Where PRP is used, we believe the meaningful questions are not simply *"Was PRP injected?"* but:

- **What was the total platelet dose?**
- **What was the biological composition of the PRP?**
- **Was the abnormal portion of the tendon accurately identified on imaging?**
- **Was the treatment delivered precisely under image guidance?**
- **Was the PRP integrated into an appropriate progressive and rehabilitation program?**

The next generation of Achilles PRP research needs to answer these questions before conclusions about the effectiveness of high-dose, biologically characterised PRP can be made confidently.

Why imaging matters

Ultrasound can assess tendon thickness, fibrillar change, neovascularity, partial tearing and dynamic behaviour. MRI can evaluate the tendon, insertion, bone marrow and surrounding structures when the diagnosis is uncertain or surgery is being considered. An acute rupture requires a different pathway from chronic tendinopathy.

If PRP is considered, why precision still matters

Mixed evidence does not make accuracy irrelevant. If a biologic treatment is selected, the exact lesion and should be defined and the needle should be guided to the intended structure. The PRP product should also be described and documented rather than treated as a generic injection.

What should I expect after treatment?

An Achilles tendon should not be aggressively "tested" immediately after injection. Early load is modified, then calf strength and tendon load are rebuilt progressively. Return to running and jumping is based on symptoms, strength and tendon capacity rather than a fixed calendar date.

Frequently Asked Questions

Is PRP proven for Achilles tendinopathy?

No. The evidence is mixed and conflicting. It may be discussed in selected chronic cases, but progressive remains central and PRP should not be oversold.

What if I felt a sudden snap?

A sudden snap, new weakness or inability to push off may indicate rupture and requires prompt assessment rather than a routine tendinopathy pathway.

Is insertional Achilles pain the same as mid-portion pain?

No. The anatomy, mechanical drivers and treatment approach differ, which is one reason imaging and examination matter.

Important: Possible Achilles rupture, rapid swelling, severe bruising, inability to push off or new calf swelling requires prompt medical assessment.

Related MBR Health resources

- PRP
- Tendon, Ligament & Muscle
- Ultrasound
- 3T MRI
- PRP Aftercare

Related Patient Guides

Explore the complete MBR Health condition-specific PRP patient-guide series:

- PG8000 – PRP for Knee Osteoarthritis
- PG8001 – PRP for Hip Osteoarthritis
- PG8002 – PRP for Shoulder Tendon and Rotator Cuff Problems
- PG8003 – PRP for Tennis Elbow and Golfer's Elbow
- **PG8004 – PRP for Achilles Tendinopathy (this guide)**
- PG8005 – PRP for Plantar Fasciitis

- PG8006 – PRP for Gluteal Tendinopathy and Greater Trochanteric Pain
- PG8007 – PRP for Hamstring, Adductor and Tendon Injuries
- PG8008 – PRP for Ligament Injuries
- PG8009 – PRP for Meniscus and Cartilage-Related Knee Pain
- PG8010 – PRP for Sacroiliac Joint Pain
- PG8011 – PRP for Facet Joint Pain
- PG8012 – PRP for Disc-Related Back Pain
- PG8013 – PRP for Neck Pain and Cervical Spine Conditions
- PG8014 – PRP for Foot and Ankle Pain

For other FAQs, please visit the MBR Health FAQs page.

References

[1] Ling SK, Mak CT, Lo JP, Yung PS. Effect of platelet-rich plasma injection on the treatment of Achilles tendinopathy: a systematic review and meta-analysis. *Orthop J Sports Med.* 2024;12:23259671241296508. doi:10.1177/23259671241296508.

[2] Pallikkara Kuttyadan N, Samad S, Shahzad M, et al. Effectiveness of platelet-rich plasma injection for chronic Achilles tendinopathy: an umbrella systematic review. *Cureus.* 2025;17(9):e92652. doi:10.7759/cureus.92652.

[3] Everts PA, Lana JF, Onishi K, et al. Angiogenesis and tissue repair depend on platelet dosing and bioformulation strategies following orthobiological platelet-rich plasma procedures: a narrative review. *Biomedicines.* 2023;11(7):1922. doi:10.3390/biomedicines11071922.

[4] Berrigan W, Tao F, Kopcow J, et al. The effect of platelet dose on outcomes after platelet rich plasma injections for musculoskeletal conditions: a systematic review and meta-analysis. *Curr Rev Musculoskelet Med.* 2024;17:570–588. doi:10.1007/s12178-024-09922-x.

[5] Oeding JF, Varady NH, Messer CJ, Dines JS, Williams RJ, Rodeo SA. Platelet concentration explains variability in outcomes of platelet-rich plasma for lateral epicondylitis: a high dose is critical for a positive response: a systematic review and meta-analysis with meta-regression. *Am J Sports Med.* 2025;53(10):2489–2496. doi:10.1177/03635465241303716.

[6] D'Souza RS, Her YF, Hussain N, et al. Evidence-based clinical practice guidelines on regenerative medicine treatment for chronic pain: a consensus report from a multispecialty working group. *J Pain Res.* 2024;17:2951-3001.

Looking for an Expert Achilles Tendon Clinic on the Gold Coast? Accuracy Matters More Than Hype

Patients searching for Achilles PRP on the Gold Coast or travelling from Brisbane should be cautious of any clinic promising a guaranteed regenerative result. MBR Health's precision approach starts with advanced ultrasound or 3T MRI to identify the exact tendon problem, then considers image-guided PRP only when the diagnosis, evidence, tissue quality and rehabilitation plan make sense. An elite tendon pathway is defined by accurate diagnosis and honest selection—not by offering the same injection to everyone.

General information only. PRP suitability, medication changes, dosing, procedure choice and rehabilitation require individual clinical assessment. Evidence and regulatory requirements continue to evolve.

Read this article online: https://mbrhealth.com.au/insights/prp-for-achilles-tendinopathy/
© 2026 MBR Health · mbrhealth.com.au