

Rotator Cuff Tendinopathy and PRP: Modest but Durable Benefit

What the shoulder-specific trials show, including partial-thickness tears

Rotator cuff tendinopathy — degeneration and irritation of the shoulder tendons, sometimes progressing to partial-thickness tearing — is one of the most common causes of chronic shoulder pain, particularly in overhead athletes and people over 40. PRP has been trialled both as a stand-alone injection for tendinopathy and partial tears, and as an adjunct to surgical repair, with the two use-cases showing different results.

What the research shows

A 2026 systematic review and meta-analysis of 10 randomised trials (591 patients) compared PRP against corticosteroid specifically for rotator cuff tendinopathy and partial-thickness tears (excluding post-surgical or full-thickness cases). It concluded that PRP provides a modest but durable functional benefit over corticosteroid, with differences emerging most clearly at later follow-up points rather than in the first few weeks.

A separate 2025 systematic review and meta-analysis of randomised trials comparing PRP with placebo, corticosteroid, or no adjunct therapy across partial- and full-thickness tears reached broadly consistent conclusions about PRP's role as a non-surgical option for appropriately selected patients.

A 2025 randomised trial specifically comparing PRP against corticosteroid for partial-thickness tears tracked outcomes at 3 and 6 months and adds to this growing comparative evidence base, while separate work has examined whether injection location (intratendinous vs subacromial vs glenohumeral) affects functional outcomes in partial-thickness tears — an important technical detail that influences results.

What this means for you

- For rotator cuff tendinopathy and partial tears (not full-thickness tears or post-surgical cases), PRP shows a real but modest advantage over corticosteroid that grows over time rather than shrinking.
- Injection technique and precise needle placement appear to matter for outcomes — ask whether ultrasound guidance and a specific target (tendon vs bursa vs joint) is being used.
- A structured rotator cuff and scapular strengthening program remains an essential companion to any injection therapy.
- PRP as an adjunct to surgical repair of larger tears is a separate question from its use in tendinopathy alone, with its own distinct evidence base.

This article summarises published research for general information and does not replace individual medical advice. Outcomes vary between patients — talk to your treating specialist about whether PRP is appropriate for your specific condition.

References

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