

Steroid Vs PRP for Rotator Cuff

For partial rotator cuff tears, **corticosteroid injections provide rapid, short-term pain relief**, while **platelet-rich plasma (PRP) injections offer better long-term functional recovery** and promote tissue healing, potentially helping to reduce tear size and avoid surgery.

Corticosteroid Injections

- **Mechanism:** Potent anti-inflammatory effect that quickly reduces local inflammation and pain. This effect is generally temporary and doesn't promote tissue regeneration.
- **Onset and Duration:** Pain relief is rapid, often within days to a couple of weeks, but symptoms frequently recur after a few months.
- **Benefits:**
 - Effective for immediate symptom management and rapid pain reduction in the short term.
 - Can help facilitate the initial phases of physical therapy by providing a pain window for exercise.
- **Risks & Considerations:**
 - Repeated injections may weaken tendon tissue over time, increasing the risk of further degeneration or full-thickness tears.
 - Can cause temporary elevation of blood sugar in diabetic patients.
 - Higher rates of re-intervention or the need for surgery compared to PRP in the long run.

Platelet-Rich Plasma (PRP) Injections

- **Mechanism:** Uses the patient's own concentrated platelets and growth factors to stimulate the body's natural healing process and cellular regeneration.
- **Onset and Duration:** Relief takes longer, with significant functional improvements typically becoming apparent after 3-6 months and continuing to improve over a year or more.
- **Benefits:**

- Promotes genuine tissue repair, with some studies showing a reduction in the actual size of the partial tear and structural improvements on imaging (MRI).
- Offers more durable, long-lasting relief and improved functional outcomes in the medium to long term.
- Lower risk of adverse tissue effects compared to steroids, as it's an autologous (from your own body) substance.
- May help patients avoid surgery in many cases.
- **Risks & Considerations:**
 - May cause initial post-injection soreness as the inflammatory healing cascade is activated.
 - Typically not covered by insurance and can be more expensive than corticosteroid injections.
 - Efficacy can be variable depending on the preparation method and individual patient factors.

Conclusion

For a partial rotator cuff tear, the choice depends on the primary goal:

- Choose **steroids** for **quick pain relief** to manage severe short-term symptoms.
- Choose **PRP** for a **longer-term solution** that targets true healing and functional recovery, potentially preventing further damage and surgery.

Consult an orthopedic specialist to determine the best approach for your specific injury and health profile.