



TMI Sports Medicine and Orthopedics

Dr. William Robertson, MD

Superdose Platelet-Rich Plasma (PRP) for Tendon Injuries

Patient Utilization Summary Sheet

Partial Rotator Cuff Tears

Key Reference: Cai and Pengfei Zhu – *Medicine and Science in Sports and Exercise*, 2018

- Study Design: Randomized trial comparing PRP in partial rotator cuff tears (mean 7mm).
- Dose: ~4 billion platelets.
- Findings:
 - Patient-reported outcomes (Constant and ASES scores) significantly improved at 6 and 12 months with PRP.
 - VAS pain scores significantly better in the PRP group.
 - MRI findings: Mean tear size reduced by approximately 3 mm at 12 months.
- Conclusion:
Superdose PRP accelerates healing of small-to-medium (mean 7mm) partial rotator cuff tears and significantly reduces pain over 12 months.

Gluteus Medius Tendinopathy / Greater Trochanteric Bursitis

Key Reference: Fitzpatrick – *American Journal of Sports Medicine (AJSM)*, 2018

- Study Design: Randomized trial comparing PRP vs. corticosteroid injection.
- Population: Average age 60 years; symptoms for ~14 months.
- Findings:
 - Functional improvement significantly greater in PRP group at 12 weeks.



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- Minimal Clinically Important Difference (MCID): Achieved in 82% of PRP patients vs. 56.7% of cortisone patients.
- Conclusion:
Superdose PRP offers superior pain relief and functional recovery for chronic gluteus medius tendinopathy (symptoms >4 months) compared to cortisone.

Tennis Elbow (Lateral Epicondylitis)

Key References:

- Mishra – AJSM, 2013:
 - At 6 months, 82% of PRP-treated patients had $\geq 50\%$ pain reduction.
 - Clinical improvement was sustained up to 6 months.
- Felli – Journal of Orthopedic Surgery, 2018:
 - Faster symptom resolution and return to activities with PRP vs. shockwave therapy.
 - Mean time to recovery: 1.1 ± 0.9 months for PRP group.
 - 88.9% patient satisfaction rate.
- Lim and Moon – Journal of Orthopedic Research, 2018:
 - PRP group showed significant improvement in pain, function, and MRI grade compared to physical therapy at 6 months.

Conclusion:

Superdose PRP provides faster pain relief, quicker return to activities, and sustained healing benefits compared to standard therapies for chronic tennis elbow.



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Summary of Clinical Benefits of Superdose PRP for Tendon Injuries:

- Enhanced pain relief compared to corticosteroids, hyaluronic acid, physical therapy, or shockwave therapy.
- Accelerated healing of tendon tissue (MRI and ultrasound-confirmed).
- Longer-lasting clinical improvement (≥ 12 months for rotator cuff and gluteus medius; ≥ 6 months for tennis elbow).
- High patient satisfaction with recovery time and return to activity.
- Superdose PRP (~4–5 billion platelets) delivers greater biological activity for tendon regeneration.