

Platelet-Rich Plasma (PRP) Injection Protocol

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Purpose & Philosophy

Platelet-rich plasma (PRP) is a biologic treatment designed to augment the body's natural healing response by delivering a concentrated source of platelets and growth factors to injured tissue. PRP is used as an adjunct to a comprehensive rehabilitation program and is not a standalone cure.

Indications

PRP may be considered for chronic tendinopathy, partial ligament tears, mild to moderate osteoarthritis, and select muscle injuries that have not responded adequately to conservative treatment.

Contraindications

Active infection, platelet dysfunction syndromes, severe anemia, anticoagulation that cannot be safely held, active malignancy at the injection site, or inability to comply with post-injection restrictions.

Pre-Injection Guidelines

Patients should avoid non-steroidal anti-inflammatory medications (NSAIDs) for at least 5–7 days prior to PRP. Adequate hydration is encouraged. A focused exam and imaging review are performed prior to injection.

Injection Technique

A peripheral blood draw is performed and processed using a centrifuge to concentrate platelets. The target tissue is identified using ultrasound guidance. PRP is injected directly into the pathologic tissue using sterile technique.

Post-Injection Care

Localized soreness and stiffness are expected for several days. Relative rest of the injected region is recommended, followed by a structured, progressive rehabilitation program. Acetaminophen and ice may be used for pain control. NSAIDs should be avoided for approximately 1–2 weeks.

after injection.

Rehabilitation Integration

PRP is paired with diagnosis-specific rehabilitation protocols focusing on gradual loading, mechanics optimization, and functional progression. Return to sport or activity is based on symptom resolution and objective readiness rather than a fixed timeline.

Expected Response & Timeline

Symptom improvement may take several weeks. Patients are counseled that PRP works by enhancing the biologic environment rather than providing immediate pain relief.

Risks & Considerations

PRP is generally safe because it is autologous. Risks include temporary pain, swelling, bruising, incomplete symptom relief, or need for additional treatment. PRP is typically not covered by insurance.

Key Principles

PRP is a tool, not a shortcut. Best outcomes occur when biologic treatment is combined with appropriate diagnosis, disciplined rehabilitation, and realistic expectations.

Key References

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