Platelet-Rich Plasma (PRP) Injections

What Is PRP?
Platelet-Rich Plasma (PRP) is a treatment made from your own blood. After a small blood draw, the sample is spun in a centrifuge to concentrate platelets. Platelets release growth factors that support tissue healing, reduce pain, and help regulate inflammation. Because PRP is autologous (from your own body), the risk of allergic reaction is extremely low.

Why Platelets Matter
Platelets contain biologically active growth factors that signal the body to repair damaged tissue, improve blood flow, and remodel collagen. These signals are especially helpful in areas with poor natural healing such as tendons, ligaments, and cartilage.

Optimal Platelet Dosing (Why Concentration Matters)
PRP is most effective when platelet concentration is approximately 3–6 times your natural baseline (roughly 1–1.5 million platelets per microliter). Too few platelets may not stimulate healing, while excessively high concentrations may increase inflammation or inhibit tissue repair. Proper dosing helps balance healing and inflammation for best results.

Types of PRP
Leukocyte-Poor vs Leukocyte-Rich PRP: Leukocyte-poor PRP is commonly used for joints and cartilage to minimize inflammation, while leukocyte-rich PRP may be selected for certain chronic tendon conditions.

When PRP Is Most Helpful
PRP is most effective for chronic or subacute conditions where healing has slowed, including: tendinopathies (tennis elbow, Achilles, patellar), mild-to-moderate osteoarthritis, plantar fasciitis, ligament sprains, and muscle injuries that have not fully healed. PRP is less effective for complete tendon ruptures, advanced bone-on-bone arthritis, or conditions requiring surgery.

What to Expect After Injection
Temporary soreness or swelling is common for several days after treatment and reflects the body's healing response. Improvement typically begins within 2–6 weeks, with maximum benefit seen by 8–12 weeks. Some conditions may benefit from a series of injections.

Medication Guidance
To optimize healing, avoid anti-inflammatory medications (such as ibuprofen or naproxen) for 5–7 days before and after PRP treatment, unless otherwise directed by your provider. Acetaminophen (Tylenol) is typically allowed.

Key Takeaways
- PRP uses your body's own healing signals
- Platelet dose and formulation matter
- Different PRP types are selected for different tissues
- Best for chronic tendon, ligament, and early joint conditions