

Post PRP/Needle Fenestration for Rotator Cuff

General Information About PRP: PRP is derived from your own blood by taking a sample of venous blood, placing it in a special tube, spinning the blood in a centrifuge for about 15 minutes. This separates whole blood into its components including red blood cells, platelets, and plasma (the non-cellular fluid in blood). The middle layer constitutes PRP, which contains highly concentrated platelets, the cells that normally promote blood clotting. These cells also contain a number of specialized chemicals called growth factors. These include platelet derived growth factor transforming growth factor beta, and vascular endothelial growth factor. These factors interact with the local cells and send signals that initiate a variety of events such as cell division and migration. The basic idea behind PRP injection is to deliver high concentrations of growth factors to an area of injury, with the hope of stimulating a healing response and reducing inflammation in the tissue. To some extent, injection of whole blood will stimulate the same response, but to a lesser degree.

PHASE I – Tissue Protection (0-1 Week)

Goals/Guidelines

- Wear sling for 2 days. After 2 days, wear as needed.
- Avoid ALL NSAIDs and topical pain-relieving gels/creams (no iontophoresis)
- Limit ice
- Minimize pain
- Improve/Maintain ROM

Rehabilitation Treatment/Exercise:

- Relative rest
- Gentle AROM (patient completing exercise handout specific to procedure)
- Take pain medication as needed (Tylenol)
- No weight training
- Avoid ALL NSAIDs and topical pain-relieving gels/creams (no iontophoresis)
- Limit ice
- Minimize pain
- Improve/Maintain ROM

PHASE II – Early Tissue Healing (1-2 Weeks)

Goals/Guidelines

- Avoid eccentric exercises
- Avoid NSAIDs and topical pain-relieving gels/creams (no iontophoresis)
- Limit ice

Rehabilitation Treatment/Exercise:

- Aerobic exercise allowed, avoid weight bearing/loading treated area
- Gentle stretching
- Proximal stability and strengthening (i.e., scapular strengthening, scapular stabilization)

PHASE III – Facilitation of Collagen Deposition (2-6 Weeks)

Goals/Guidelines

- Avoid eccentric exercise
- Avoid NSAIDs and topical pain-relieving gels/creams (no iontophoresis)
- Avoid ice
- Full pain free ROM
- Avoid compensatory movement patterns (i.e., scapular hiking with overhead shoulder motion)

Rehabilitation Treatment/Exercise:

- Low weight, high repetition isometrics
- Soft tissue work to area treated
- Dynamic stretching
- Joint mobilizations as needed for joint stiffness
- Core strengthening exercises
- Open kinetic chain strengthening exercises (late stage III, 5-6 weeks post procedure)
- Proprioceptive activities (late stage III, 5-6 weeks post procedure)

PHASE IV – Collagen Strengthening (6-12 Weeks)

Goals/Guidelines

- Patient expected to be 30% improved by week 6
- Avoid NSAIDs
- Avoid ice
- Improve strength
- Return to function

Rehabilitation Treatment/Exercise:

- Eccentric exercises as long as pain scale <3/10
- Closed kinetic chain exercises
- Plyometrics, proprioceptive training, other sport specific exercises
- Return to work or sport
- Resume full activity

PHASE V – Return to Activity (3+ Months)

Goals/Guidelines

- Reassess improvement
- If not >75% improvement by 3 months, consider repeat PRP
- Return to work or sport
- Resume full activity

Rehabilitation Treatment/Exercise:

- Progress back to functional sport specific activities with increasing load on area treated as pain allows
- Max out on eccentric exercises
- May return to sport if pain < 3/10