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REGENERATIVE ORTHOPAEDICS

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KNEE REHAB STRATEGIES for PRP, Bone Marrow INTRA TENDON/LIGAMENT injections

Overlap of timelines is based on the patient's condition, severity of injury, and monitored progress

Patient Response:

Day 1-5: Inflammatory stage, can be moderate to severe pain.

Day 6-14: Diminishing pain and improving

Day 14- On: Sometimes no pain at all, improved quality of ROM

*Therefore, pain is not an indicator of the healing process!!!

Goals:

- Initiate safe and gradual passive range of motion
- Diminish pain and inflammation, decrease muscle tightness and spasms
- Progress to strength and gradual return to sport when ready

Modalities:

- Do not heat or ice for 72 hours post injection, after ok.
- Manual therapies (deep tissue, ART, Graston) should be reserved for periphery, not directly to the injected site for first 4-6 weeks. U/S and TENS unit ok after 1st week post injection

RANGE OF MOTION AND WEIGHT BEARING:

- **Week 1:** No ROM, maintain in brace locked at 0°. Non-Weight Bearing for 1 week.
- **Week 2:** Begin passive ROM to 60°. Weight bearing as tolerated, walking only, with brace locked at 45°
- **Week 3:** Progress passive ROM to 90°. Weight bearing as tolerated with brace locked at 90°.
- **Week 4:** Progress to full passive and active ROM. Weight bearing as tolerated, Wean off brace.
- **Week 4-5:** Begin gentle stretching.
- **Week 5-6:** Begin Stretching of muscles

STRENGTH: All pathologies must go through week 1 and 2. Weeks 3 and so on.... can be modified depending on the above pathologies and sport related in season vs post season. This schedule is optimal for tissue healing.

- **Week 1:** no strengthening, no activity, no modalities.
- **Week 2:** Gentle PROM only Towel slides to 60°.
- **Week 3:** begin PROM and AAROM exercises within pain free range (no stretching).
Level 1 exercises: SLR's, bridging, planks, heel raises, form run @ walk pace. Selective dynamic warm- Up.
Begin straight leg closed chain exercises on stable surface only.
- **Week 3-4:** Initiate Leg press or assisted squat and lunge, Dynamic warm-up, Form run @ trot to jog pace ladder @ jog pace. Resisted walk outs -all directions. Begin Bike for cardio.
- **Week 4-5:** Begin Squat and lunges, Controlled and low intensity (in place) return to sport drills. Progressive 40-60 yards (jog, and stride). Begin elliptical for cardio.
- **Week 6-7:** Begin Jump Progression, increase speed of agility, change direction, Jogging for cardio
- **Week 7-10:** Begin sprinting and Return to sport activities 50-75%. Effort
- **Week 10-12:** Return to competition in a very gradual, progressive, manner.