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**WOODSON PATELLOFEMORAL SYNDROME (JUMPER'S KNEE)
REHAB PROTOCOL**

General Info:

This is a list of general guidelines for a patellofemoral syndrome (runner's knee) rehab program. These guidelines may change based on fixation, condition of repaired tissue, variations in surgical procedures, age, and patient's response to treatment. Please call our office if there are any questions.

Phase I

- ROM:
 - Full range of motion
 - Hamstring, IT band, gastroc-soleus, quadriceps, and hip flexor stretches
 - Patella MOBS
- Strengthening:
 - Quad sets with biofeedback
 - Straight leg raises in 4 planes
 - Heel raises, toe raises
 - Short arc quads (30°-0°)
 - Leg press (0°-45°)
 - Hamstring curls
 - TKE with theraband
 - Bicycle with resistance and seat set high
- Balance Training:
 - Single leg balance with plyo-toss
 - Sports cord balance with agility work
 - Wobble board
 - ½ foam roller
 - Mini-trampoline
- Modalities:
 - Electrical stimulation with biofeedback, as needed
 - Ice for 15-20 minutes following activity
- Progression to Phase II:
 - Adequate pain control as verbalized by the patient
 - Independent in home exercise program
 - Adequate quadriceps/vastus medialis oblique contractions

Phase II

- ROM:
 - Continue with all stretching exercises from Phase I, concentrating on the muscle groups with the greatest deficiencies.

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- Strengthening:
 - Straight leg raises with ankle weights or tubing
 - Short arc quads with ankle weights
 - Knee extension (90°-45°, 90°-30°); with ROM varied related to pain report
 - Leg press; single-leg eccentric
 - Hamstring curl
 - Reverse lunge. NOT to migrate knee over toe
 - Mini-squat (0-30°)
 - Stool crawl
 - Straight leg dead lift
 - Multi-hip in 4 directions
 - Bicycle for endurance
 - EFX for strength and endurance
- Balance Training:
 - Continue with all balance activities from Phase I
 - Advance balance/neuromuscular by variance of surfaces
- Modalities:
 - Ice for 15-20 minutes following activity
- Progression to Phase III:
 - Adequate pain control as verbalized by the patient
 - Improvement of lower extremity strength and endurance
 - Normalizing dynamic balance, proprioception, and coordination

Phase III

- ROM:
 - Continue with all stretching exercises from Phase II, concentrating on the muscle groups with the greatest deficiencies.
- Strengthening:
 - Continue with all strengthening activities from previous phases increasing weight and repetition
 - Progressively increase resisted knee ROM within a pain-free arc
 - Continue with all eccentric quadriceps/hamstring work
 - Bicycle for strength and endurance
 - EFX for strength and endurance
 - Advance all single leg activity within pain-free range
- Balance Training:
 - Continue with advanced balance, proprioception, and coordination training
- Running Program:
 - Initiate running on a mini-trampoline, progressing to a treadmill as tolerated
 - Initiate jump rope for impact/endurance activity
 - Backward running
- Agility Program:
 - Initiate agility drills-carioca, high knee drills, short sprints, figure 8's
- Functional Program:
 - Initiate sports specific drills
 - Initiate functional drills
- Modalities:
 - Ice for 15-20 minutes following activity