

## TJ Ridley, MD

Phone: 763-717-4120 | Website: TJRidleyMD.com | Instagram: @dr.\_ridley

# MPFL (Medial Patellofemoral Ligament) & TTO (Tibial Tubercle Osteotomy) Protocol

#### 0-6 WEEKS POST OP:

- Toe-touch weight bearing x 6 weeks
- ROM 0-30 for first week, then advancing 15 degrees each week
- · Begin and Enhance normalization of quad recruitment
- Modalities as needed
- Teach patient to perform Home Stretching Exercises 2 –3x's daily
- Begin patella mobilizations
- Scar management
- Quad sets
  - o No SLR x 6 weeks
- Seated calf ex's
- Teach Quad ex's for home program
- BFR- Initiate at post op day 14

### **6 WEEKS POST OP:**

- Advance weight bearing as tolerated
- Advance ROM as tolerated
- Stationary Bike to increase ROM, start with high seat and progress to normal height when able, resistance as tolerated
- Discontinue brace and normalize gait mechanics
- Begin hamstring sets, and toe/heel raises

#### 10 WEEKS POST OP:

- Continue as above
- Leg press with both legs
- Leg extensions with anti-shear device or cuff weights progress weight as tolerated, keep resistance proximal

#### 14 WEEKS POST OP:

- Continue as above
- May begin aquatic therapy emphasizing normal gait, marching forwards/backwards
- Treadmill walking forwards and retro
- Closed and Open Chain Tubing ex's
- Single leg stands for balance/proprioception
- Chair/Wall squats keep tibia perpendicular to floor

- Unilateral step-ups start with 2" height and progress to normal step height as able
- Running progression at 14 weeks if appropriate radiographic healing

#### 18 WEEKS POST OP:

- Continue as above
- ROM should be progressing, if not contact physician
- Stairmaster, Versa Climber, Nordic Track and Elliptical Trainers
- Slide Board start with short distance and progress as tolerated
- Cable Column ex's retro walking, lateral stepping, NO cross over stepping or shuffling
- Standing leg curls with cuff weights or seated leg curls
- Isokinetic Exercises
- Initiate plyometric program as appropriate to patient's functional goals
  - o If plyometric exercise intensity is high the volume must be decreased, give ample recovery time between sets

#### **20 WEEKS POST OP:**

- Continue as above
- · Assessment of jogging on treadmill
- Lateral Movement supervised by ATC or PT
  - Stepping, shuffling, hopping, carioca
- Isokinetic Exercises
- Initiate sport specific activities under supervision by ATC or PT

#### 24 WEEKS POST OP:

- Continue as above
- Emphasize strength and power development
- Running and sport specific drills under ATC or PT supervision
- Functional sports testing at 24 weeks
- Continue strength testing monthly until patient passes then perform functional testing
- Clearance by physician prior to return to sport

#### **RETURN-TO-SPORT CRITERIA:**

Full return to all sports and games

- At least 6 months from surgery
- Complete radiographic healing of the osteotomy
- No functional complaints, full range of motion & no effusion
- Confidence when running, cutting, jumping at full speed
- >90% isometric quadriceps strength
- >90% contralateral values on hop tests
- >90% Quad Index LSI with Biodex or HHD
- >90% Quad peak torque/body weight on Biodex (if applicable)