

## **Physical Therapy Protocol: Isolated Lateral Extra-articular Tenodesis (LET)**

### **Phase 1: Weeks 0 through 6 – Lateral Extra-articular Tenodesis Protection, Motion Recovery**

**Physician Goals:** Protect the LET, which is at its most vulnerable during this time, decrease pain, prevent significant stiffness

**Restrictions:** Weight bearing as tolerated, brace on at all times, no range of motion restrictions, brace locked in full extension for sleep

**Exercises:** Patella mobilization, quad sets with brace locked at 0°, straight leg raises with brace locked in full extension until quad control is good, then straight leg raises unlocked, active knee extension 0 to 90°, heel slides, ankle pumps, body weight core strengthening

**Total Visits:** 12 – once to twice per week with daily at home range of motion exercises, quad sets, ankle pumps

### **Phase 2: Weeks 6 through 12 – Strength Recovery**

**Physician Goals:** Begin to build lower extremity strength and endurance while avoiding tibial rotation, discontinue brace completely

**Restrictions:** No cutting or pivoting

**Exercises:** Short arc squats/weight shifts, start proprioceptive training, initiate step-up program and progress to step-down program, leg press, lunges, isotonic knee extensions, elliptical, retrograde treadmill ambulation, advance hip/core/glute strengthening, stationary bike with low resistance

**Total Visits:** 12 – once to twice per week depending on patient's ability to perform HEP independent of PT sessions

### **Phase 3: Weeks 12+ - Return to Sports and Recreation**

**Physician Goals:** Increase strength throughout the entire range of motion without restrictions, begin to regain endurance

**Restrictions:** None

**Exercises:** Progress closed chain strengthening; return to run, cutting/agility, sport per criteria below continue to emphasize core/hip/glute strengthening

**Total Visits:** 24 – once to twice per week depending on patient's ability to perform strength training independently – goal is strengthening 3-4x per week

### Return to Running Criteria:

- Trace effusion, flexion within 5° of contralateral side
- Limb symmetric index (LSI) on anterior reach Y balance test  $\geq 90\%$
- LSI on quadriceps torque output on isometric measurement  $\geq 75\%$
- 12" single leg squat tolerance with good hip control
- Able to walk > 1 mile with no limping or pain
- Able to "hop" with upper extremity assistance on operative leg 5 times without pain or compensation
- Single leg balance with eyes closed  $\geq 30$  seconds

### Return to Cutting / Agility Training Criteria:

- Return to running criteria met above
- No effusion
- Full range of motion
- Quad LSI on isokinetic  $\geq 85\%$
- Hamstring LSI on isokinetic  $\geq 85\%$
- LSI on anterior reach Y-balance  $\geq 95\%$
- Single leg hopping pain free

### Return to Sport Criteria:

- LSI  $\geq 95\%$  hamstring curl and leg press
- Able to perform single leg squat to 75° with correct form
- Single leg hop LSI  $\geq 95\%$
- Y-balance  $\geq 95\%$  (mean of 3 trials in anterior, posterolateral and posteromedial  $\div 100$ )
- Vertical jump test, single leg hop distance, and timed single leg hop over 20 feet  $\geq 90\%$  contralateral side