

## **ANTERIOR CRUCIATE LIGAMENT RECONSTRUCTION WITH COMPLEX MENISCUS REPAIR**

### **General Considerations:**

- It is important to recognize that all times are approximate and that progression should be based on careful monitoring of the patient's functional status.
- PROM as tolerated. Early emphasis is on achieving full extension.
- Patients will be in a knee immobilizer for 4 weeks postop.
- Nonweightbearing for 3-4 weeks.
- Closed chain activities initiate at 3-5 weeks postop and beginning between 20-70° OR in full extension to avoid stress on the repair. Avoid submaximal CKC exercises for 8 weeks.
- Active hamstring exercises can be initiated at 6 weeks and resistive at 8 weeks.
- No lateral exercises for 10 weeks and no pivoting or ballistic activities for at least 4 months postop.
- No resisted leg extension machines (isotonic or isokinetic) at any point in the rehab process.
- Patients are given a functional assessment at 14 weeks and 5-6 months post-op.

### **Week 1:**

- Straight leg raise exercises (lying, seated, and standing), quadriceps/adduction/gluteal sets, gait training.
- Well-leg stationary cycling, abdominal exercises, and upper body conditioning.
- Soft tissue treatments to posterior musculature, retropatellar, and surgical incisions.

### **Weeks 2-4:**

- Continue with pain control, gait training, and soft tissue treatments.
- Aerobic exercises consisting of UBE, well-leg stationary cycling, and upper body weight training.

### **Weeks 4-6:**

- Discontinue use of knee immobilizer if able to demonstrate adequate quad control.
- Incorporate closed chain exercises (i.e., mini-squats, modified lunges, short step-ups) **between 20-70°** OR in full extension. Avoiding going into the last 15-20° of extension avoids stress on the repair.
- Add hamstring curls without resistance\*.
- Patients should have full extension and 110° of flexion by the end of this period.

### **Weeks 6-8:**

- Leg weight machines (i.e., light leg press, calf raises, abduction/adduction).
- Crutch-assisted gait until able to ambulate with minimal to no limp.
- Stationary cycling initially for ROM, increasing as tolerated.
- Increase the intensity of functional exercises (i.e., add a stretch cord for resistance, add weight, increasing resistance of aerobic machines).

**Weeks 8-12:**

- Introduce resistive hamstring curls\*.
- Add lateral training exercises (i.e. lateral stepping, lateral step-ups, step overs).

**Weeks 12-16:**

- Progress to running as able to demonstrate good mechanics and appropriate strength.
- Begin to incorporate sport-specific training (i.e., volleyball bumping, light soccer kicks, and ball skills on contralateral side).
- Patients should be weaned to a home program with emphasis on their particular activity.

**Weeks 16-24:**

- Incorporate bilateral jumping and bounding exercises, making sure to watch for compensatory patterns and any signs of increased load on the knee with take-offs or landings.

\*--cautiously introduce hamstring-resisted exercises, watching for signs of joint line/meniscus irritation.