

PATELLAR FRACTURE / TENDON REPAIR POST-OPERATIVE PROTOCOL

PHASE I – MAXIMUM PROTECTION:

WEEKS 0-4

- Brace locked in full extension for 6 weeks
- Initiate weight bearing as tolerated in brace starting at 2 weeks post-op
- Ice and modalities to reduce pain and inflammation
- Patella and patella tendon mobility drills
- Range of motion 0° to 30° knee flexion. Increase 10°/week until full range of motion is achieved.

WEEKS 4-6:

- Full weight bearing
- Continue patella/patella tendon mobility

PHASE II – PROGRESSIVE RANGE OF MOTION AND EARLY STRENGTHENING:

WEEKS 6-8:

- Full weight bearing
- Open brace 0°-90°
- Continue with swelling control and patella mobility
- Gradually progress to full range of motion
- Begin quadriceps setting
- Begin multi-plane straight leg raising and closed kinetic chain strengthening program focusing on quality VMO function.
- Initiate open kinetic chain progressing to closed kinetic chain multi-plane hip strengthening
- Normalize gait pattern
- Begin stationary bike
- Initiate pool program

WEEKS 8-10:

- Wean out of brace
- Continue with patella mobility drills
- Normalize gait pattern
- Restore full ROM
- May begin short arc quadriceps contraction 0-30°
- Progress open and closed kinetic chain program from bilateral to unilateral
- Increase intensity on stationary bike
- Begin treadmill walking program

WEEKS 10-12:

- Full ROM
- Terminal quadriceps stretching
- Advance unilateral open and closed kinetic chain strengthening

• Initiate proprioception

drills

• May introduce elliptical trainer

PHASE III - PROGRESSIVE STRENGTHENING:

WEEKS 12-16:

- Advance open and closed kinetic chain strengthening
- Increase intensity on bike, treadmill, and elliptical trainer
- Increase difficulty and intensity on proprioception drills
- Begin gym strengthening: leg press, hamstring curls, ab/adduction; avoid lunges and knee extensions
- Begin multi-directional functional cord program

PHASE IV - ADVANCED STRENGTHENING AND FUNCTIONAL DRILLS:

WEEKS 16-20:

- May begin leg extensions; 30° to 0°
- Begin pool running program advancing to land as tolerated

PHASE V - PLYOMETRIC DRILLS AND RETURN TO SPORT:

WEEKS 20-24:

- Advance gym strengthening
- Progress running/sprinting program
- Begin multi-directional field/court drills
- Begin bilateral progressing to unilateral plyometric drills
- Follow-up appointment with physician
- Sports test for return to competition