



JOINT PRESERVATION INSTITUTE

Patellar Fresh Osteochondral Allograft Post-Operative Protocol

Phase I – Maximum Protection (Weeks 0 to 12):

Weeks 0 to 6:

- Brace locked in full extension for 6 weeks during routine activities. Ok to remove for PT.
- Non-weight bearing for 4 weeks with brace on.
- Ice and modalities to reduce pain and inflammation
- Aggressive patella mobility drills
- Range of motion – 0° to 90°knee flexion

Weeks 7-12:

- Gradual progression of weight bearing to WBAT with brace locked in full extension..
- Continue with ice and aggressive patella mobility
- Gentle Passive Range of motion – 0° to 120° (as of week 6)
- Increase intensity with quadriceps setting

Phase II – Progressive Range of Motion and Early Strengthening (Weeks 12 to 16):

Weeks 12-16:

- Full weight bearing
- Discontinue brace.
- Continue with swelling control and patella mobility
- Begin multi-plane straight leg raising and closed kinetic chain strengthening program focusing on quality VMO function.
- Initiate open kinetic chain limited to 50 lbs.
- Normalize gait pattern
- Begin stationary bike
- Initiate pool program

Phase III – Progressive Strengthening (Weeks 16 to 20):

Weeks 16 to 10:

- 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 21-24):

Weeks 21-24:

- May begin leg extensions; 30° to 0° progressing to full ROM as patellofemoral arthrokinematics normalize
- Begin pool running program advancing to land as tolerated

Phase V – Plyometric Drills and Return to Sport Phase (Weeks 25 to 28):

Weeks 25-28:

- 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