

Osteochondral Allograft Implantation:

The intent of this protocol is to provide the therapist with guidelines of the post-operative rehabilitation course after an osteochondral allograft implantation. It should not be a substitute for one's clinical decision making regarding the progression of a patient's post-operative course based on their physical exam findings, individual progress, and/or the presence of post-operative complications. The therapist should consult the referring physician with any questions or concerns.

INDIVIDUAL CONSIDERATIONS:

PHASE I (Weeks 0-6)**Weightbearing**

- Non-weightbearing

Bracing

- Week 1 - Hinged knee brace locked in full extension at all times except when on CPM and during physical therapy
- Weeks 2-6 - Gradually open brace in 20° increments as quad control is obtained. Discontinue use of brace when quads can control SLR without an extension lag

ROM

- Continuous Passive Motion (CPM) for 6 hours a day for 6 weeks
 - Start at 40° of flexion; increase 5-10° daily per patient comfort
 - Goal of 100° by week 6

Therapeutic Exercise

- PROM/AROM to tolerance
- Patella and tibiofibular joint mobilization (grades I & II)
- Quad, hamstring, adductor and gluteal sets

- Hamstring stretches
- Hip strengthening
- SLR/Ankle pumps
- Week 2 - incorporate patellar mobilization and prone hangs

Phase II (Weeks 6-8)

Weightbearing

- Partial weight bearing - 25%

Bracing

- None

ROM

- Gradually increase flexion to 130°

Therapeutic Exercise

- Continue with quad/hamstring/core strengthening
- Scar and patellar mobilization
- Stationary bike for ROM
- Continue to advance lower extremity strengthening activities

Phase III (Weeks 8-12)

Weightbearing

- Gradually return to full weightbearing

Bracing

- None

ROM

- Progress to full/painless ROM

Therapeutic Exercises

- Gait training
- Begin closed chain exercises – wall sits/shuttle/mini-squats/toe raises
- Begin unilateral stance activities
- Continue quad/hamstring/core strengthening

Phase IV (Week 12 -6 months)

Weightbearing

- Full weightbearing with normal gait pattern

Bracing

- None

ROM

- Full and pain-free

Therapeutic Exercise

- Advance closed chain strengthening exercises, proprioception activities
- Sport-specific rehabilitation: jogging at 4 months
- Return to athletic activity 9-12 months post-op when cleared by surgeon
- Maintenance program for strength and endurance