

Rehabilitation Protocol: Osteochondral Allograft Implantation

Phase I (Weeks 0-6)

- **Weightbearing:** Non-weightbearing
- **Bracing:**
 - Hinged knee brace locked in extension (week 1) – remove for CPM and rehab with PT
 - Weeks 2-6: Gradually open brace in 20° increments as quad control is obtained
 - D/C brace when patient can perform straight leg raise without an extension lag
- **Range of Motion** – Continuous Passive Motion (CPM) Machine for 6-8 hours per day for 6-8 weeks
 - Set CPM to 1 cycle per minute – starting at 40° of flexion
 - Advance 10° per day until full flexion is achieved (should be at 100° by week 6)
 - PROM/AAROM and stretching under guidance of PT
- **Therapeutic Exercises**
 - Patellar mobilization
 - Quad/Hamstring/Adductor/Gluteal sets – Straight leg raises/Ankle pumps

Phase II (Weeks 6-8)

- **Weightbearing:** Partial weightbearing (25% of body weight)
- **Range of Motion** – Advance to full/painless ROM (patient should obtain 130° of flexion)
- **Therapeutic Exercises**
 - Continue with Quad/Hamstring/Core strengthening
 - Begin stationary bike for ROM

Phase III (Weeks 8-12)

- **Weightbearing:** Gradually return to full weightbearing
- **Range of Motion** – Full/Painless ROM
- **Therapeutic Exercises**
 - Begin closed chain exercises – wall sits/shuttle/mini-squats/toe raises
 - Gait training
 - Continue with Quad/Hamstring/Core strengthening
 - Begin unilateral stance activities

Phase IV (Months 3-6)

- **Weightbearing:** Full weightbearing with a normal gait pattern
- **Therapeutic exercise**
 - Advance closed chain strengthening exercises, proprioception activities
 - Sport-specific rehabilitation – jogging at 4-6 months
- Return to athletic activity – 9-12 months post-op
- Maintenance program for strength and endurance