

Rehabilitation Protocol: Osteochondral Allograft / Autograft – Femoral Condyle (OCA / OATS)

Date of Surgery: _____

Procedure: ☐ Osteochondral Allograft (OCA) ☐ Osteochondral Autograft (OATS) Location: ☐ MFC ☐ LFC

Concomitant: ☐ HTO/DFO ☐ ACL Reconstruction ☐ Meniscus Repair/Transplant – follow the more conservative restriction

Monitor effusion throughout; if persistent, reduce load/volume and contact our office. Please contact our office with any questions or concerns.

☐ **Phase I – Protection (Weeks 0–6)**

- **Weightbearing: Toe-touch weightbearing with crutches for 6 weeks**
- **Hinged Knee Brace:** Locked in extension for week 1 (remove for CPM and PT); unlock once able to perform SLR without lag
- **Range of Motion – CPM 2 hours, 3× daily for 6 weeks** (1 cycle/minute). **Goals: 0–90° weeks 0–2; 0–105° week 3; 0–115/120° week 4; 0–130° week 6**, progressing to full. PROM/AAROM with PT
- **Therapeutic Exercises**
 - Quad sets with NMES (quad stim); hamstring, adductor, and gluteal sets; SLR; ankle pumps
 - Patellar mobilization (all planes)
 - Short crank bike once 85–90° flexion; consider BFR training
- **Criteria to Progress:** ROM 0–130°; SLR without lag; minimal effusion; normal patellar mobility

☐ **Phase II – Weightbearing Progression (Weeks 6–8)**

- **Weightbearing: Partial weightbearing (25%)**
- **Range of Motion – Advance to full, painless ROM**
- **Therapeutic Exercises**
 - Quad, hamstring, and core strengthening
 - Stationary bike for ROM; step-up progression initiation (weeks 6–8)

☐ **Phase III – Strengthening (Weeks 8–12)**

- **Weightbearing: Gradually return to full weightbearing;** gait training
- **Therapeutic Exercises**
 - Closed chain: wall sits, leg press/shuttle, mini squats, toe raises; progress BFR to weight-bearing exercises
 - Eccentric step-down program (weeks 8–12); single-leg stance activities
 - Interval bike program weeks 10–12
- **Criteria to Progress:** Full weightbearing with normal gait; full ROM; quad and hamstring strength ≥70% of contralateral limb

☐ **Phase IV – Advanced Strengthening (Weeks 12–20)**

- **Therapeutic Exercises**
 - Advance closed chain strengthening and proprioception
 - **Running progression at weeks 16–20 (OATS: 18–20)** – AlterG or pool first, once controlled 8" step-down; progress to treadmill after symptom-free 95% WB on AlterG

- **Criteria to Progress:** Quad and hamstring strength $\geq 80\%$ of contralateral limb; no pain or effusion after activity

☐ **Phase V – Return to Sport (Week 20+)**

- **Therapeutic Exercises**
 - Plyometrics double to single leg; agility and sport-specific training
 - Be cautious of patellofemoral overload as activity increases
- **Return to Sport:** Criteria-based – return-to-sport testing (strength and hop testing $\geq 90\%$ of contralateral limb), no pain or effusion; physician clearance