

**Osteochondral Autograft Transplantation Procedure**  
 Rehabilitation Protocol  
 Dr. Henry

**Phase I – Proliferation (Weeks 0 to 6):**

**Goals**

- Protect healing surfaces from shear forces
- Restore full passive knee extension with gradual increase in flexion
- Control postoperative pain and swelling
- Regain quadriceps control

**Weight-Bearing Precautions **Does brace need to be locked****

- Femoral Condyle lesions
  - NWB (4 weeks)
  - TTWB (week 4-6)
  - Partial 50% WB (week 3-4)
- Patellafemoral Lesions (Brace locked in extension at all times)
  - TTWB (0-2 weeks)
  - Partial 50% (week 2-3)
  - Partial 75% (week 4-5)

**Treatment Strategies:**

- Initiate CPM 6-8 hours per day
- Quad sets
- Patella mobility
- SLR's (all planes)
- Bike ergometry
- Weight shifting exercise as WB permits
- Aquatic therapy (after Wound healing)
- NO active knee extension for patella-femoral lesions

<b>MD Appointments</b>
2 weeks
6 week
12 weeks
6 months

**Phase II – Transition phase (Week 6 to 12):**

**Goals:**

- Restore full ROM and normal gait
- Increase activities of daily living
- Discharge brace at week 6

**Weight-Bearing Precautions:**

- Femoral Condyle Lesions:
  - Partial 75% (week 6-7)
  - WBAT (week 8) Discharge crutches at week 8-10
- Patellafemoral Lesions
  - WBAT (week 6) Discharge crutches at week 6-8

**Treatment Strategies:**

- Leg press 90 to 0 degrees (week 8)
- SLR's with resistance
- Neuromuscular balance training (bilateral)
- **Week 6 patellafemoral/ Week 8 femoral condyle lesions:**
  - Mini Squats (0-45°)
  - Forward step-up program
  - Front lunges
  - Wall squats

**Phase III – Remodeling phase (Weeks 12 to 26):**

**Goals:**

- Return to normal ADL's
- Improve Muscular Strength and endurance

**Precautions:**

- Avoid pain with therapeutic exercise
- Avoid sport activity and running until MD clearance

**Treatment Strategies:**

- Progress Squats program (0-60°)
- Forward step down program
- Elliptical Trainer
- Forward treadmill walking program

**Phase IV – Strengthening and Plyometric Phase (Weeks 16+):**

**Goals:**

- Pain-free running
- Gradual return to full unrestricted activity

**Treatment Strategies:**

- Forward running
- Advance proprioception and agility drills
- Sports test for return to play

Revised 10/2010