



OATS Autograft  
Femoral Condyles

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## PHASE I – IMMEDIATE POST SURGICAL PHASE (WEEK 0-2):

- Goals
  - Protection of post-surgical knee
  - Gradually increase ROM
  - Decrease pain and inflammation
  - Prevent muscular inhibition
  - Restore leg control
- Cryotherapy for pain/inflammation
  - Ice 15-20 minutes every hour
- Sleeping
  - Sleep in brace
- Weight Bearing (may be modified in certain situations)
  - Femoral condyle lesions
    - NWB
- Brace
  - Hinged brace locked in extension at all times
  - Remove for CPM and exercises only
  - Typically discontinued after 2 weeks
- ROM
  - Prone hangs
  - Knee extension on a bolster
  - Supine wall slides
  - PROM off end of table as tolerated without pain
  - CPM machine 6 hrs/day, beginning at 0-40 degrees, progressing 5-10 degrees per day as tolerated
- Muscle Retraining
  - Quadriceps isometrics, SLR
- Patellar mobilizations
- Note: ROM exercises should be carried out frequently throughout the day with several repetitions in order to remodel the developing knee fibrocartilage. The goal for the first 6 weeks is 4-8 hours of ROM exercises per day

## PHASE II – PROTECTION PHASE (WEEK 2-6):

- Goals
  - Allow healing of soft tissue/bone
  - Do not overstress healing tissue

- Gradually increase ROM
  - Progression based on swelling/inflammation and guidelines below
- Decrease pain and inflammation
- Brace
  - Typically discontinue brace after 2 week visit
- Weight bearing
  - Femoral condyle lesions
    - NWB until 6 weeks
- ROM guidelines
  - Exercises as above
  - CPM continue to advance as above
  - PROM/AAROM to tolerance
- E-stim to quads
- Quad isometrics
- SLR
- May begin pool activity at week 5 in chest-deep water

### **PHASE III – INTERMEDIATE PHASE (WEEK 6-12):**

- Goals
  - Gradual improvement in ROM
  - Eliminate swelling
  - Normalize gait
- Criteria to progress to Phase III
  - 6 weeks post-op
  - No effusion
  - Full extension
- Precautions
  - Avoid post-activity swelling
  - Avoid loading knee at deep flexion angles
  - No impact activities until 12 weeks post-op
- Weight bearing
  - Advance 25% weekly until FWB
- ROM
  - Full motion as tolerated
- Continue quadriceps strengthening
- Continue above exercises
- Gait drills
- Stationary bicycle
- Hip/core strengthening
- Closed chain quad exercises at <60 degrees flexion

### **PHASE IV – STRENGTHENING PHASE (WEEK 12-20):**

- Goals
  - Maintain full ROM
  - Improve limb strength and endurance
  - Gradual return to functional activities
- Criteria to progress to Phase IV

- Full, non-painful ROM
  - Absence of swelling/inflammation
  - Good control of affected limb
  - Normal gait on all surfaces
  - Single-leg balance >15 seconds
- Precautions
  - Post-activity soreness should resolve in <24 hours
  - Avoid knee pain with impact
- Continue above exercises
- Movement control exercises
  - Begin with single plane activities and progress
- Sport specific activities when cleared by Dr. Hess