



OATS Allograft  
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 (and hygiene)
    - Typically discontinued after 2 weeks (if quads can control SLR without lag)
  - 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 5-10degrees 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