



OATS Autograft
Patella/Trochlea

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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/knee immobilizer if prescribed (usually in patellofemoral lesions only)
 - Weight Bearing (may be modified in certain situations)
 - Patellofemoral lesions
 - Hinged brace locked in extension for ambulation x 2 weeks
 - WBAT in brace
 - ROM
 - 0-30 degrees
 - Prone hangs
 - Knee extension on a bolster
 - Supine wall slides
 - CPM machine- 6 hrs/day, 0-30 degrees
 - Muscle Retraining
 - Quadriceps isometrics, SLR
 - Patellar mobilizations
 - Avoid in patellofemoral lesions for first 4 weeks
 - 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
 - Continue brace (patellofemoral lesions)
 - May unlock when ambulating after 2 weeks
 - Daytime use only after 2 weeks
 - Weight bearing
 - Patellofemoral lesions
 - WBAT with brace unlocked after 2 weeks
 - ROM guidelines
 - CPM 0-60 degrees week 2-4
 - CPM 0-90 degrees week 4-6
 - 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
 - WBAT for all lesions
 - 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
 - Impact control exercises
 - Begin 2 feet to 2 feet, progress to 1 foot to other foot, then 1 foot to same foot
 - Movement control exercises
 - Begin with single plane activities and progress
 - Sport specific activities when cleared by Dr. Hess