



Post-operative Rehabilitation Protocol

Osteochondral Allograft Transplant

Phase 1 (0-6 weeks post op):

Goals	<ul style="list-style-type: none">• Minimize pain• Reduce edema• Restore ROM
Brace/Precautions/ Crutch Use	<ul style="list-style-type: none">• Weight bearing:<ul style="list-style-type: none">○ 0-2 weeks: toe-touch to 25% weight-bearing○ 2-8 weeks: 50% weight bearing• Brace: 0-2 weeks: 0-90 degrees; 2-6 weeks: open to available range<ul style="list-style-type: none">○ IF graft involving patella or trochlea: leave brace locked in extension for ambulation; unlocked at all other times○ Brace may be removed for hygiene and therapy
Range of Motion	<ul style="list-style-type: none">• Weeks 0-2: 0-90 degrees• Weeks 2+: progress to full ROM
Strengthening	<ul style="list-style-type: none">• Restore quadriceps recruitment through strengthening exercises• Quadriceps, hamstring, and gluteal strengthening exercises• Exercises to reduce swelling/ effusion (modalities as needed)• Quadriceps NMES
Home Instructions	<ul style="list-style-type: none">• Keep surgical dressings clean and dry• Change surgical bandages on the 2nd day after surgery (keep covered until first clinic visit)• Avoid getting sutures wet until at least 5 days after surgery (do not scrub, soak, or submerge the incisions)• Note DVT (blood clot) prophylaxis medications provided by your surgeon to take following surgery – follow those instructions carefully.
Suggested Exercises	<ul style="list-style-type: none">• Ankle pumps• Quad isometrics• Heel Slides• Patella mobilizations• SAQ and LAQ (through protected ROM- 90-45 degrees)• SLR 4-ways• Flexion and extension ROM exercises• Clamshells• Stationary bike as ROM allows (week 3-4) – low resistance.

Phase 2 (6-12 weeks post op):

Goals	<ul style="list-style-type: none">• Full, pain-free ROM• No effusion• Good control and no pain with functional movements
Brace/Precautions/ Crutch Use	<ul style="list-style-type: none">• Weight-bearing:<ul style="list-style-type: none">○ Weeks 6-8: 50% WB○ Weeks 8+: Progress to WBAT• Brace: Discontinue brace after 6 weeks

	<ul style="list-style-type: none"> ○ Focus on obtaining full extension as WBAT progresses
Range of Motion	<ul style="list-style-type: none"> • Restore full, pain-free active ROM
Strengthening	<ul style="list-style-type: none"> • Continue strengthening exercises from Phase I • Advance gluteal strengthening exercises to closed chain • Closed chain quadriceps and hamstring exercises • Begin pool program – gait drills and protected weight bearing strengthening exercises • Begin stationary bike - progressing resistance as tolerated
Home Instructions	<ul style="list-style-type: none"> • Restore normal activities of daily living (within weight-bearing restrictions)
Suggested Exercises	<ul style="list-style-type: none"> • Stationary bike • Weight shifting • Double leg balance and proprioceptive training • Leg Press 0-60 degrees • Mini-squats • Wall sits • TKEs

Phase 3 (12-24 weeks post-op):

Goals	<ul style="list-style-type: none"> • Normalize gait • Progress balance and NM control • Maintain full ROM
Brace/Precautions/ Crutch Use	<ul style="list-style-type: none"> • Progress to full weight-bearing without crutches
Range of Motion	<ul style="list-style-type: none"> • Maintain full ROM
Strengthening	<ul style="list-style-type: none"> • Continue strengthening exercises from Phase 2 • Progress lower extremity and gluteal strengthening • Advance lower extremity strengthening exercises (open and closed chain) • Advance gluteal strengthening exercises • Begin functional activity/sport specific work
Home Instructions	<ul style="list-style-type: none"> • Maintain normal activities of daily living
Suggested Exercises	<ul style="list-style-type: none"> • Progress balance and proprioception exercises (integrate balance with strengthening exercises – BOSU squats and lunges) • Wall squats • Lunges • Include cardiovascular conditioning with elliptical, swimming, and cycle

Phase 4 (6 months+ post-op):

Goals	<ul style="list-style-type: none"> • Progress to sport specific and/or unrestricted functional activities • Maximize strength and flexibility to meet demands of individual's sport/work activity
Precautions/ Crutch Use	<ul style="list-style-type: none"> • None
Range of Motion	<ul style="list-style-type: none"> • Maintain full ROM
Strengthening	<ul style="list-style-type: none"> • Continue previous advance lower extremity strengthening, flexibility, and agility programs
Home Instructions	<ul style="list-style-type: none"> • Maintain normal activities of daily living • Any return to sport and high impact decision needs clearance from the physician to confirm healing of the graft on x-ray before that progression may begin
Suggested Exercises	<ul style="list-style-type: none"> • Progress resistance on above exercises as tolerated • Impact control exercises • Jogging and running progression • Sport/work specific balance, agility, and proprioceptive drills

