



# Osteochondral Autograft Transfer System (OATS) Protocol

<u>Postop</u>	<u>Goals</u>	<u>Precautions</u>	<u>Exercises/Interventions</u>
<b>Phase 1</b> <b>Weeks 0-2</b> <b>1-2x/ week</b> <b>HEP Daily</b>	0° active knee extension (no lag) 0-1 week: No knee flexion Week 2: Allow up to 90° P/AAROM Gait with assistive device Promote healing and protect incision	Toe Touch weight bearing (<20%) Assistive device (typically bilateral crutches) Week 0-1: Brace locked in extension Week 1-2: Brace locked for ambulation and unlocked 0-30 degrees at rest  CPM per MD order	Ankle pumps, Quad sets, Glute sets Straight leg raises Heel slides seated Hip strengthening (resistance proximal to knee) Ankle strengthening Gait training (brace, crutches) Passive ROM Patella mobilization Biofeedback Pain education/management
<b>Phase 2</b> <b>Weeks 2-6</b> <b>1-2x/ week</b> <b>HEP Daily</b>	Promote healing Avoid pain/swelling 4 weeks: Allow up to 110° P/AAROM	TTWB (<20%) 4 weeks: Only patella/trochlear groove may progress to PWB (50% body weight) 4 weeks: unlock brace during ambulation Knee brace 0-30 degrees Avoid sheering/compression force with patella/trochlear groove Avoid increasing pain or swelling Avoid Stairs  CPM per MD	Progress above exercises as appropriate/tolerated Standing terminal knee extension Stationary bike or NuStep Initiate OKC strengthening
<b>Phase 3</b> <b>Weeks 6-8</b> <b>1-2s/week</b> <b>HEP Daily</b>	Normalized gait Progress ROM as tolerated Initiate closed chain	PWB (50% body weight) Progress weight bearing by 25% body weight each week as tolerated Femoral condyle may progress slower than patella or trochlea groove Discharge brace when able to perform straight leg raise without lag	Progress above exercises Closed Chain exercises *0-30° arc *Low resistance/High rep *20-30 lbs. initial * Progress 20-30 lbs. weekly Wall sits Mini squat Proprioception training Initiate step ups
<b>Phase 4</b> <b>Weeks 8-12</b> <b>1-2x/ week</b> <b>HEP Daily</b>	Independent Stairs Knee flexion WNL	WBAT (Individualized to patient) Avoid increasing pain/swelling	Progress above exercises Progress step ups into step downs Shuttle recovery/leg press -slow progression

<b>Phase 5</b> <b>Weeks 12-16</b> <b>1x/ week</b> <b>HEP Daily</b>	Progress symmetry of strength	WBAT Avoid painful activities No running	Progress from double leg to single leg for proprioception and strengthening
<b>Phase 6</b> <b>Weeks 16+</b> <b>1x week</b> <b>HEP Daily</b>	Normalize gait mechanics with jogging Proper body mechanics with plyometrics Progress return to agility drills and sport	Avoid painful activities No running until: Strength >70% contralateral side No agility training until: Strength >90% contralateral side No RTP until: Passes RTP evaluation MD clearance	Progress above Begin forward running 20 weeks: Begin Plyometrics as appropriate Progress to sports specific drills when able to perform plyometrics with proper body mechanics 24 weeks may consider returning to sport when able to demonstrate the above properly. *However, seek MD clearance.