

Osteochondral Allograft Transplantation Patella and/or Trochlea Rehab Protocol

Description of Procedure: Reconstruction of patient’s own cartilage and bone defect within the knee using a fresh cadaver donor. The allograft is shaped to fit the exact contour of current defect and press fit into place.

Safety Warning: Avoid stairs and inclines for six months post-operatively.

	Weight Bearing	Brace	ROM	Therapeutic Exercise
Phase I: 0 to 6 Weeks	Weight bearing as tolerated with use of two crutches. Once a straight leg raise can be performed without extension lag, progress to one crutch as tolerated and then full weight bearing with normalized gait pattern; no limping.	Brace is worn until independent straight leg raise can be performed without extension lag	0 to 3 Weeks: CPM: Use for 8 hours per day at 1 cycle/minute - begin at 0 to 30° increasing as rapidly as possible to re-establish full motion anytime patient does not feel ‘stretch’ **Goal: To achieve active range of motion as soon as tolerated	Prone hangs, heel props, quad sets, SLR, hamstring isometrics - complete exercises in brace if quad control is inadequate; core proximal program; normalize gait; FES biofeedback as needed <i>** Incorporate use of stationary bike (high seat, low resistance) and patellar mobilization exercises after surgical dressing is removed</i>
Phase II: 6 to 12 Weeks	Progression to full weight bearing with normalized gait pattern; no limping	None	Full active range of motion	Progress bilateral closed chain strengthening using resistance less than patient’s body weight, progress to supine unilateral leg press with low weight, high reps; continue opened chain knee strengthening (NO squats, wall slides, lunges or knee extension exercises)

	Weight Bearing	Brace	ROM	Therapeutic Exercise
Phase III: 12 Weeks to 12 Months	Full, with a normalized gait pattern	None	Full active range of motion	<p>12 Weeks to 6 Months: Advance bilateral and unilateral closed chain exercises with emphasis on concentric/eccentric control, continue with biking, elliptical, and walking on treadmill, progress balance activities</p> <p><i>**At 6 months, may progress stairs if adequate quad strength no pain or swelling</i></p> <p>6 to 9 Months: Advance strength training</p>
Phase IV: 12 to 24 Months	Full, with a normalized gait pattern	None	Full active range of motion	<p>Continue Strength Training: Initiate light jogging - start with 2 minute walk/2 minute jog, emphasize sport-specific training; emphasize single leg loading, plyometrics, begin agility program</p> <p><i>**High impact activities (basketball, tennis, etc.) may begin at 12 months AND after passing a pain free functional progression test</i></p>

Progression back to sport is dependent on case per case basis and determined by Dr. Roberson. If pain or swelling occurs patient is expected to stop causative activity and follow-up with our office.

Leg extension exercises with resistance are not allowed indefinitely.