

Osteochondral Allograft Transplantation Femoral Condyles 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: Non-weight bearing for four to six weeks post-operatively. No stairs for six months.

	Weight Bearing	Brace	ROM	Therapeutic Exercise
Phase I: 0 to 6 Weeks	<p>0 to 4 Weeks: Foot flat, non-weight bearing with the use of two crutches</p> <p>4 to 6 Weeks: May gradually increase to full weight bearing</p>	Brace is worn until independent straight leg raise can be performed without extension lag	<p>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'</p> <p><i>*Goal: To achieve full range of motion as soon as tolerated</i></p>	Progress bilateral closed chain strengthening using resistance less than patient's body weight
Phase II: 6 to 12 Weeks	Progression to full weight bearing 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, and walking on treadmill, progress balance activities</p> <p><i>**May progress to stairs around 6 months if adequate quad strength; no pain or swelling</i></p> <p>6 to 12 Months: Advance strength training, incorporate elliptical trainer</p>
Phase IV: 12 to 24 Months	Full, with a normalized gait pattern	None	Full and pain-free	<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 post operatively 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.