OATS-Osteochondral Autograft/allograft Transfer System

Rehab Protocol Aaron Vandenbos, MD



Phase 1: Generally 0-6 Weeks Post-Op	
GOALS:	1) ROM: 0-90 (minimum) by two weeks post-operatively. Emphasize full
	extension of the knee
	2) Minimize pain and swelling
PRECAUTIONS:	-Non-weight bearing weeks 0-4
	-Wear brace AT ALL TIMES except during CPM use and physical therapy.
	-DO NOT SUBMERGE knee in water until 4 weeks post-op and incisions
	have fully healed
CRUTCHES:	-Use crutches for walking x 6 weeks.
	 Weeks 0-4: NWB. Your foot may touch the floor to keep you
	balanced, but you should not put any additional weight on the
	leg.
	 Weeks 4-6: WB is 25% of your body weight. Your therapist will
	teach you how to do this.
BRACE:	-You will wear the brace x 6 weeks. Range of motion is allowed and
	encouraged in the brace as soon as tolerated. You may remove the brace
	for CPM use and physical therapy.
CPM:	-Use for 4-6 hours per day at 1 cycle per minute. Begin at 0-30 degrees,
	after the block wears off, and increased 10 degrees per day as tolerated.
	Use for 4 weeks after surgery. An alternative to CPM use is active range of
	motion exercises (bending and straightening) 100 reps/5 times per day.
MODALITIES:	-Cryotherapy, electrical stimulation, edema control, etc.
REHABILITATION:	-ROM: Goal is to achieve full knee range of motion by 4-6 weeks.
	Heel slides, prone hangs
	-Progress bilateral closed chain strengthening using resistance less than
	patient's body weight
	-Hip/Core progressive resistive exercises
	-Patellar mobilization emphasize superior glides
FOLLOWIE	-Gastroc-soleus stretch
FOLLOW-UP:	-Supervised rehab: 2-3x per week
	-PT re-eval: weekly
	-Ortho re-eval: ~2 to 4 weeks post-op

PHASE 2: Generally 6-12 Weeks Post-Op	
GOALS:	1) ROM: full/normal range of motion by this point
	2) Weight bearing: Full, wean off crutches
	3) Normal gait pattern, no limping
BRACE:	-None required.
	-May consider functional brace for activities, especially if concomitant
	ligament of meniscus surgery
CPM:	-Discontinued. Progress knee flexion.

REHABILITATION:	-Progress bilateral closed chain strengthening using resistance less than patient's body weightProgress to supine unilateral leg press with low weightBegin open chain knee strengthening -NO squats, wall slides, lunges or knee extension exercises -Begin stationary bike when knee flexion is > 110 degrees -Begin proprioception program -Continue edema control/modalities/patellar mobilization
FOLLOW-UP:	-Supervised rehab: 2-3x per week -PT re-eval: every 3-4 weeks
	-Ortho re-eval: ~12 weeks post-op

PHASE 3: Generally 12-24 Weeks Post-Op		
GOALS:	1) May begin walking on treadmill	
	2) May begin jogging at 5-6 months	
REHABILITATION:	-Continue all exercises from earlier protocol	
	-Advance bilateral and unilateral closed chain exercises	
	-Isokinetic quadriceps exercises	
	-Progress proprioception/balance activities	
	-Incorporate elliptical trainer and stairs at 5-6 months post-op	
FOLLOW-UP:	-Supervised rehab: 2-3x per week	
	-PT re-eval: every 3-4 weeks	
	-Ortho re-eval: ~24 weeks post-op	

PHASE 4: Generally 24 Weeks Post-Op		
GOALS:	1) Progress slowly through lateral movement exercises	
	2) Sport-specific training without pain or swelling	
	3) Mitigate future injury risk	
PRECAUTIONS:	- NO PARTICIPATION in sports or physically demanding military schools	
	until cleared for return to sport by the rehabilitation team	
REHABILITATION:	-Continue advanced strengthening	
	 Full arc progressive resistance exercises-emphasize quads 	
	-Progress treadmill/swimming program	
	-Progress plyometrics program	
	-Progress sport training program	
	-Progress neuromuscular/functional program	
	-Agility drills	
RETURN TO SPORT:	-You need to be cleared by Ortho Surgeon and your physical	
	therapist/athletic trainer	
	-In general return to sports and cutting activities is allowed after the	
	patient achieves adequate flexibility, strength and endurance of the knee	
	that is equal to at least approximately 90% of the other side and there is	
	full incorporation of the graft. This generally is allowed around 9-12	
	months after surgery.	

These guidelines were created as a framework for the post-operative rehabilitation program. They DO NOT substitute for any specific restrictions or requirements that are determined through the necessary shared decision-making and collaboration between the operating surgeon and treating rehabilitation team.