

ACL RECONSTRUCTION (PATELLA TENDON GRAFT)* WITH AUTOLOGOUS CHONDROCYTE IMPLANTATION (FEMORAL CONDYLE) REHABILITATION PROTOCOL

	WEIGHT BEARING	BRACE	ROM	THERAPEUTIC EXERCISES
PHASE I 0 - 12 weeks	<p>0-2 weeks: non-weight bearing</p> <p>2-4 weeks: partial weight bearing (30 - 40 lbs) with crutches</p> <p>4-6 weeks: progress to one crutch</p> <p>6-12 weeks: progress to full weight bearing without crutches</p>	<p>0-2 weeks: locked in full extension (removed for CPM and exercise)</p> <p>2-6 weeks: gradually open 20° at a time as patient gains quad control - discontinue use of brace when patient has good quad control, but no sooner than 6 weeks</p>	<p>0-4 weeks: CPM: use in 2 hour increments for 6 - 8 hours per day, begin at 0-30°, 1 cycle/minute - after week 3, increase flexion by 5-10° daily</p>	<p>1-2 weeks: active/passive ROM, active knee extension 90-60°, quad/hamstring sets, SLR, begin active hamstring strengthening</p> <p>2-6 weeks: progress exercises in phase I, add resistance above the knee, begin closed chain exercises keeping weight bearing restrictions in mind</p> <p>6-10 weeks: weight shifting activities, progress closed chain and hamstring strengthening, forward/backward treadmill walking, begin Stairmaster</p> <p>10-12 weeks: progress closed chain activities using resistance less than patient's body weight, open chain knee extension 90-30°, continue hamstring strengthening, balance activities</p>
PHASE II 12 weeks - 6 months	Full with a normalized gait pattern	None	Maintain full active/passive range	Advance closed chain exercises, begin full ROM active knee extension*, progress treadmill - initiate light jog
PHASE III 6 - 12 months	Full with a normalized gait pattern	None	Full and pain-free	Initiate slight incline with treadmill jog, emphasize single leg loading, begin progressive running and agility program including sport-specific activities

*Monitor for signs of patella femoral irritation