

**AUTOLOGOUS CHONDROCYTE IMPLANTATION OF THE PATELLOFEMORAL JOINT
WITH DISTAL REALIGNMENT REHABILITATION PROTOCOL**

	WEIGHT BEARING	BRACE	ROM	THERAPEUTIC EXERCISE
PHASE 1 0-12 weeks	* 0-6 wks: heel touch weight bearing (20%)	0-2 wks: locked in full extension (remove for CPM/exercise/hygiene)	0-6 wks: CPM for a total of 6-8 hrs/day to 40 to 60° as advised	1-6 wks: quad sets, co-contractions isometric abduction/adduction ankle strength/ all ROM's
		2-6 wks: 0-40° or 60° as advised	** May let knee hang to 90° up to 3x/day for a few minutes to prevent stiffness	6-10 wks: SLR, partial wall sits, terminal knee ext w/ TB, no greater than +45° continue previous exercises
	6-8 wks: transition to full weight bearing	6-8 wks: wean from brace	6+ wks: progress to full ROM; D/C CPM	10-12 wks: hamstring strength, TB resistance at 0-45° light open chain ex.-all ROMs at knee and hip
PHASE 2 12 weeks- 6 months	Full with a normalized gait pattern	None	Full	Begin treadmill walking at slow pace, progress to balance/proprioception ex. initiate sports-specific drills
PHASE 3 6 months- 12 months	Full	None	Full	Advance close chain strength ex. focus on single leg strength, progress to walking and bac plyometric movements TM, initiate light plyometric movements
PHASE 4 12 months- 18 months	Full	None	Full	Continue strength training, emphasize single leg loading, progressive running/ agility program, high impact at 18 mo

* WB is restricted for the first 4-6 weeks to protect the bony portion of the procedure

** Post operative stiffness in flexion following trochlear/patellar implantation is not uncommon and patients are encouraged to achieve 90° of flexion at least 3x/day out of the brace after their first post operative visit (7-10 days)

Note: If significant pain or swelling occurs with any activity, the protocol must be modified to decrease symptoms as per physician recommendations

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