

MACI/AUTOCART/MICROFRACTURE/BIOCARTILAGE**

TO PATELLA/TROCHLEA

REHABILITATION PROTOCOL

	WEIGHT BEARING	BRACE	ROM	EXERCISES
PHASE I 0-8 weeks	Full w/ brace	<p>0-2 week: Locked in full extension at all times*</p> <p>Off for CPM, hygiene, and exercise only</p> <p>2-4 weeks: Unlocked 0-45 and worn daytime only</p> <p>4-6 weeks: Unlocked 0-90 and worn daytime only</p> <p>Discontinue at 6 weeks</p>	<p>0-2 wks: Gentle passive 0-45 as tolerated</p> <p>2 wks+: advance as tolerated</p> <p>0-6 wks: use CPM 6 hours/day, advance 5-10 degrees/day as tolerated, d/c at 6wks***</p> <p>Goals: 0-2 wks: 0-30 2-4 wks: 0-60 4-6 wks: 0-90</p>	<p>0-2 weeks: Quads sets, SLR, calf pumps, passive leg hangs to 45° at home</p> <p>2-6 weeks: PROM/AAROM to tolerance, patella and tibiofibular joint mobs, quad, hamstring, and glute sets, SLR, side-lying hip and core</p> <p>6-8 weeks: Addition of heel raises, closed chain exercises, gait normalization, eccentric quads, eccentric hamstrings; advance core, glutes and pelvic stability</p>
PHASE II 8-12 weeks	Full	None	Full	<p>Progress closed chain activities and gait training</p> <p>Begin unilateral stance activities, balance training, hamstring work, hip/core/glutes</p> <p>Begin stationary bike at 10 wks with low resistance as tolerated</p>
PHASE III 12-24 weeks	Full	None	Full	<p>Advance Phase II exercises; maximize core/glutes, pelvic stability work, eccentric hamstrings, balance</p> <p>Swimming as tolerated after 12 weeks</p> <p>Elliptical as tolerated after 16 weeks****</p>
PHASE IV 6-12 months	Full	None	Full	<p>Advance functional activity without impact</p> <p>Return to sport-specific activity and impact when cleared by MD after 6-8 months</p>

*Brace may be removed at night after first post-operative visit (day 7-14) if directed

**Please follow PT script if different than this protocol. Alignment correction procedures (HTO, DFO, TTO) would change protocol

***If CPM is not prescribed, goal is 600-800 reps of gentle ROM each day

****Microfracture patients can advance back to sport as tolerated after 16 weeks