

TIBIAL TUBERCLE OSTEOTOMY (TTO) WITH PATELLOFEMORAL CARTILAGE RESTORATION (MACI/ALLOGRAFT) PHYSICAL THERAPY PROTOCOL

Recommend 2-3x/week for 8 weeks
Please contact office for renewal as needed

Weeks 0-2	<ul style="list-style-type: none"> • Toe touch weight bearing • Brace locked in full extension when not performing below exercises (sleeping, resting, etc.) • CPM 6 hours/day 0-30° • Passive leg hand to 45°, quad sets, patellar mobilization, ankle pumps, straight leg raises
Weeks 3-6	<ul style="list-style-type: none"> • Toe touch weight bearing with brace 0-45° in weeks 2-4; 0-90° in weeks 4-6 • CPM 6 hours/day 0-60° for weeks 2-4 • CPM 6 hours/day 0-90° for weeks 4-6 • Patellar mobilization, quad/hamstring/gluteal sets, side lying hip and core exercises
Weeks 7-8	<ul style="list-style-type: none"> • Advance weight bearing (25%/week) until fully weight bearing • Discontinue brace when patient able to SLR without extension lag • Advance ROM as tolerated
Weeks 9-12	<ul style="list-style-type: none"> • Gait training • Begin closed chain exercises (wall sits, mini squats [no weight], stationary bike) • Unilateral stance activities and balance training
Months 3-6	<ul style="list-style-type: none"> • Maximize core/gluteal/pelvic stability work • Slowly incorporate open chain quad exercises (begin short arc then progress) • Eccentric hamstring exercises • Advance to elliptical, bike, pool activity as tolerated
Months 6+	<ul style="list-style-type: none"> • Run progression/jogging can begin • Return to sports-specific activities