

Patellar Realignment/Tibial Tubercle Osteotomy Protocol

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Week 0-2:

Goals: Control inflammation and pain, Protect soft tissue and tubercle fixation
Restrictions: No SLR, weight on a flexed knee, or active extension exercises. Brace on at all times during day and while sleeping, apart from therapy or CPM.
Weight bearing: TTWB (20%) with immobilizer or locked hinged knee brace
Motion: 0-90 assisted knee flexion, quad sets, ankle pumps
CPM: Progress as tolerated if patient has one
Strength: None at this time

Weeks 2-6:

Goals: Increase ROM, Control inflammation and pain, Protect soft tissue and tubercle fixation
Restrictions: No SLR, weight on a flexed knee, or active extension exercises. Brace can be off at night.
Weight bearing: TTWB (20%) in immobilizer
Motion: Maintain full extension and progress flexion to full as tolerated by patient, Quad sets
Strength: None

Weeks 6-12:

Goals: Increase ROM, Progress to full Weight bearing, Establish normal gait with unlocked brace
Restrictions: Avoid overload in patellofemoral joint, closed chain to 30 degrees only. May discontinue brace.
Weight bearing: advance 25% weekly to FWB as tolerated with normalized gait pattern
Motion: Full ROM, active stretching, stationary bike
Strength: Progressive leg lifts, walking, hip/core

Months 3-4:

Goals: Improve confidence in the knee, Protect the patellofemoral joint, Progress with strength, power, and proprioception
Restrictions: Avoid overload in patellofemoral joint
Motion: Can incorporate additional aerobic exercises
Strength: Progress, walk/jog intervals, functional balance, core, glutes

Months 4-5:

Goals: Return to unrestricted activity by 4-5 months
Progress running and agility training
Progress with flexibility and strengthening program, Advance with closed chain exercises, Begin pool jogging and progress to running on land, Begin to incorporate cutting drills into agility training, Advance heights with plyometric conditioning, Sports specific drills (start a 25% on speed and advance as tolerated)

Months 6+:

Goals: Return to sport

Return to sport after cleared by surgeon. Criteria for Return to Sports: Full range of motion, No effusion, Quad and hamstring strength 90% of contralateral side, No patellofemoral symptoms