



From the office of:

Andrew J Blackman, MD

121 St Luke's Center Drive, Suite 302
Chesterfield, MO 63017 314-523-2595
AndrewBlackmanMD.com



PHYSICAL THERAPY PROTOCOL PROCEDURE: HIGH TIBIAL OSTEOTOMY

I) Weeks 0-2:

- Restrictions:
 - 1) Knee immobilizer as needed
 - 2) TTWB with crutches

- Goals:
 - 1) Reduce pain
 - 2) Reduce swelling
 - 3) Reduce muscle atrophy
 - 4) Gradual full range of motion

- Anti-edema
 - 1) Ice/Cryotherapy multiple times during the day
 - 2) Compression with TubiGrip/TEDS

- Therapy/Exercises examples:
 - 1) Quad sets, SLR
 - 2) Hamstring sets
 - 3) Gluteal sets
 - 4) Hip belt abduction isometrics
 - 5) Pillow adductor squeezes
 - 6) Crunches
 - 7) Ankle dorsiflexion/plantar flexion isometrics or Theraband strengthening
 - 8) Multi-directional patella mobilization

II) Weeks 3 to 12:

- Restrictions:
 - 1) Weight-bearing status: OK to begin partial progressive weightbearing at week 3 if pain allows. OK to begin/progress weightbearing if pain <4/10.

First week:	PWB 1/3 body weight
Second week:	PWB 2/3 body weight
Third week:	FWB with crutches/crutch/cane
Fourth week:	Discontinue ambulatory aids (No limp)

- Goals:
 - 1) Reduce effusion
 - 2) Full weight bearing without crutches as soon as pain allows
 - 3) Continue full ROM
 - 4) Minimize hip, core and lower extremity atrophy

- Therapy/Exercises examples:
 - 1) Gait training
 - 2) Stationary bicycle with no resistance once knee flexion greater than 90 degrees
 - 3) Continue quad sets, SLR, leg curl and heel slides
 - 4) Strengthen quads, hamstrings, and hip abductors/extensors using ankle weights and/or elastic band resistance through full ROM as tolerated
 - 5) Gentle closed-chain terminal knee extension 0-40 degrees (TKE) permitted starting at 9-10 weeks as tolerated.
 - 6) Body weight partial squats and leg press 60- to 0- degree arc.
 - 7) AlterG Treadmill walking
 - 8) Multi-directional patella mobilization

III) Weeks 13+:

- Restrictions:
 - 1) Return to impact loading activities and clearance for return to sports as determined by surgeon
 - 2) No pivoting sports should be started without surgeon clearance

- Goals:
 - 1) Full active range of motion of the involved knee
 - 2) No effusion
 - 3) Improved quad strength and endurance

- Weight bearing:
 - 1) Normal walking

- Therapy/Exercises:
 - 1) Resisted open-chain exercise with \leq 20lbs to be progressed as tolerated after 6mos
 - 2) Closed-chain exercise to promote knee stability and proprioception through full ROM as tolerated. Progress mini-squats to squats. Leg press 90- to 0- degree arc.
 - 3) Cycling on level surfaces permitted with gradual increase in tension per level of comfort
 - 4) Treadmill walking/reverse treadmill walking encouraged