



Renny Uppal, M.D.

HIGH TIBIAL OSTEOTOMY WITH OSTEOCHONDRAL GRAFTING REHAB PROTOCOL

0-6 WEEKS: PHASE I

Weight-bearing Status:

- Non-weight-bearing

CPM Machine

- Start 0-30, progress 5 degrees per day as tolerated to 120 (discontinue at 4 wks post-op)

Range-of-Motion and Stretching Exercises:

- Passive knee flexion and knee extension range-of-motion
 - Wall slides or heel slides to increase knee flexion range-of-motion
 - Wall slides and passive knee extension with heel supported to increase extension range-of-motion
 - Passive leg hangs to 90 at home
 - Hamstring, IT band, calf stretches as needed
- Exercises
 - 0-2 weeks: Quad sets, straight leg raises, ankle pumps, passive and active assisted ROM to tolerance
 - 2-4 weeks:
 - Wall slides to 120, progress ROM with heel slides
 - patella mobs
 - isometric quad/glute sets, isometric hamstring sets at 70-90 of knee flexion
 - straight leg raises
 - hip adduction and core exercises
 - ankle plantar flexion with tubing resistance
 - 4-6 weeks:
 - Full knee flexion and extension range-of-motion
 - Progress above exercises adding hip abduction

Stationary bicycle with minimum resistance when range-of-motion allows, progress resistance as appropriate.

6-8 WEEKS: PHASE II

Weight-bearing Status:

- Progress to full weight-bearing without assistive device by 8 weeks post surgery
- Discontinue brace at 6 weeks

Strengthening Exercises:

- Closed kinetic chain
- Progress phase I exercises

8-12 WEEKS: PHASE III

Exercises:

- Standing toe raises
- Partial squats, wall sits
- Leg press exercise
- Step exercises: step-down, step-up, lateral stepping
- Isokinetic training: 200+ speed
- Balance training
- Treadmill walking (gait training), progressing to an uphill grade of 2-3%
- Stairmaster, Elliptical Trainer

12 WEEKS-6 MONTHS

- Advance phase III exercises
- Maximize core/glute, pelvic stability, eccentric hamstrings

6-12 MONTHS

- Advance sport specific activities
- Must be cleared to return to sport without restrictions