



Lisa Kaplin, DO

OPEN REDUCTION INTERNAL FIXATION TIBIAL PLATEAU FRACTURE REHAB

PHASE I – MAXIMUM PROTECTION (0 TO 1 WEEKS):

0 TO 1 WEEK:

- Ice and modalities to reduce pain and inflammation
- Use crutches **non-weight bearing for 8 weeks**
- **Brace for 6-8 weeks in full extension**
- Elevate the knee above the heart for the first 3 to 5 days
- Initiate patella mobility drills
- Begin full passive/active knee range of motion exercises
- Quadriceps setting focusing on VMO restoration
- Multi-plane open kinetic chain straight leg raising
- Gait training with crutches (NWB)

PHASE II – PROGRESSIVE STRETCHING AND EARLY STRENGTHENING (WEEKS 1 TO 6):

WEEKS 1 TO 6:

- Maintain program as outlined in week 0 to 1
- Continue with modalities to control inflammation
- Initiate global lower extremity stretching program
- Begin stationary bike and pool exercise program (when incisions healed)
- Implement reintegration exercises emphasizing core stability
- Closed kinetic chain multi-plane hip strengthening on uninvolved side
- Manual lower extremity PNF patterns
- Proprioception drill emphasizing neuromuscular control
- Multi-plane ankle strengthening



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PHASE III – STRENGTHENING AND PROPRIOCEPTIVE PHASE (WEEKS 6 TO 10):

WEEKS 6 TO 8:

- Modalities as needed
- Continue with Phase II exercises as indicated
- Begin partial weight bearing at 25% of body weight and increase by 25% approximately every 3 days. May progress to one crutch at 7 1/2 weeks as tolerated, gradually wean off of crutches by week 8 – 9

WEEKS 9 TO 10:

- Normalize gait pattern
- Advance stationary bike program; begin treadmill walking and elliptical trainer; Avoid running and impact activity
- Initiate closed kinetic chain exercises progressing bilateral to unilateral
- Initiate proprioception training

PHASE IV – ADVANCED STRENGTHENING AND INITIATION OF PLYOMETRIC DRILLS (WEEKS 10 TO 20):

WEEKS 10 TO 16:

- Initiate gym strengthening-beginning bilateral progressing to unilateral
 - Leg press, heel raises, hamstring curls, squats, lunges, knee extensions (30° to 0° progressing to full range as PF arthrokinematics normalize)

WEEKS 16 TO 20:

- Continue with advanced strengthening
- Begin functional cord program
- Begin pool running program progressing to land as tolerated

PHASE V – RETURN TO SPORT FUNCTIONAL PROGRAM (WEEKS 20 TO 24):

- Follow-up examination with physician
- Implement sport specific multi-directional drills and bilateral plyometric activity progressing to unilateral as tolerated
- Continue with aggressive lower extremity strengthening, cardiovascular training, and flexibility
- Sports test for return to play