

TIBIAL PLATEAU FRACTURE POST-OPERATIVE PROTOCOL

PHASE I – MAXIMUM PROTECTION

WEEKS 0-1:

- Ice and modalities to reduce pain and inflammation
- Use crutches non-weight bearing for 6-10 weeks, depending on severity of fracture
- Brace full range of motion
- Elevate the knee above the heart for the first 3-5 days
 - Exercises:
 - Initiate patella mobility drills
 - Begin full passive/active knee range of motion exercises
 - Quadriceps setting focusing on VMO restoration
 - o Multi-plane open kinetic chain straight leg raising
 - Gait training with crutches (NWB)

PHASE II - PROGRESSIVE STRETCHING AND EARLY STRENGTHENING

WEEKS 1-6:

- Maintain program as outlined in weeks 0-1
 - Use crutches non-weight bearing
 - Brace full range of motion
- Continue with modalities to control inflammation
 - Exercises:
 - 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
 - o Multi-plane ankle strengthening

PHASE III - STRENGTHENING AND PROPRIOCEPTIVE PHASE

WEEKS 6-8:

- Modalities as needed
- Continue with Phase II exercises as indicated
 - Weight bearing (depends on specific fracture):
 - 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 weeks 8 9

WEEKS 9-10:

- Normalize gait pattern
 - Exercises:
 - Advance stationary bike program; begin treadmill walking and elliptical trainer; Avoid running and impact activity

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- o Initiate closed kinetic chain exercises progressing bilateral to unilateral
- o Initiate proprioception training

PHASE IV - ADVANCED STRENGTHENING AND INITIATION OF PLYOMETRIC DRILLS

WEEKS 10-16:

- Exercises:
 - 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 16-20:

- Exercises:
 - 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 20-24:

- Follow-up examination with physician at 6 months
 - Exercises:
 - 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