**Tibial Plateau Fracture Rehabilitation Protocol**

**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 6 weeks**
* **Brace for 6 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

**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 71/2 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

**RETURN TO ACTIVITIES**

Running: 4-5 months when functional criteria are met

Golf: Short irons at 4 months, full swing with long irons at 5 months.

Delay 4-6 weeks if lead leg.

Pivoting/cutting sport: When functional criteria are met and cleared by surgeon, typically

7+ months at earliest