REHABILITATION GUIDELINES: TIBIAL PLATEAU FRACTURE OPEN REDUCTION INTERNAL FIXATION

STAGE 1 (Day 1 - 4 weeks):

**ROM:** ASK SURGEON: hinged brace locked in full extension, pillow under calf with leg elevated, patellar mobilizations, gradually increase ROM 0-90 degrees, brace during sleep for 6 weeks.

**Strength:** quad sets and SLR (without weights), ROM for flexion 0-45 degrees in sitting position with eccentric and concentric quadriceps, avoid contraction of hamstrings and calf. Resistance ankle plantar flexion exercises with the knee in extension with rubber tubing.

**Weightbearing:** 0%

**Modalities:** EMG biofeedback quadriceps prn; EMS prn; cryotherapy

STAGE 2 (4 weeks - 6 weeks):

**ROM:** progress flexion as tolerated-10 degrees/week

**Strength:** PRE and SLR as above

**Weightbearing:** 0%

**Modalities:** as above.

STAGE 3 (6 weeks - 4 months):

**ROM:** Increase flexion to within normal limits; may remove brace for sleep at 8 weeks

**Strength:** PRE-quads 0-30 degrees only, hamstrings 0-10 degrees, squats, hip abduction and adduction, stationary bicycling, step-ups(Stair Master), rowing machine, swimming, sliding board; progress with closed kinetic chain strengthening with weightbearing progress.

**Weight bearing:** ASK SURGEON: at 10 weeks, start at 25%, progress to 100% by post-op week 12.

**Modalities:** as above.

**Athletes:** After 12 weeks: steps-ups, rowing machine, swimming, and slide board

STAGE 4 (4 months - 6 months):

**ROM:** as above

**Strength:** PRE-quad PRE into full extension with gradual transition

**Weight bearing:** Initiate straight ahead jogging to 1/2 speed running as tolerated(IF APPLICABLE TO LIFESTYLE) (once 65% strength attained in hamstrings and quadriceps)

**Modalities:** prn

**Athletes:** IF APPLICABLE TO LIFESTYLE, initiate straight jogging to 1/2 speed running(if applicable)

STAGE 5 (6 months and beyond):

**ROM:** as above

**Strength:** as above

**Modalities:** as above

**Athletes:** progress through graduated running program such as “functional rehabilitation program”

Resume main sports if patient has obtained near full ROM and has obtained at least 80% of quad and hamstring strength as compared to the other extremity.