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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.

No hamstring PREs; Calf ROM

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.