REHABILITATION GUIDELINES FOR DISTAL FEMUR & TIBIAL PLATEAU FRACTURE

Stage 1 (Day 1-4 weeks):
- ROM: hinged splint locked in full extension, pillow under calf with leg elevated, patellar mobilizations, gradually increase ROM 0-90 degrees, brace during sleep for 6 weeks; no bracing for physical therapy and range of motion exercises.
- Strength: quad sets and SLR (without weights), ROM for flexion 0-45 degrees in sitting position with eccentric and concentric quadriceps; resistance ankle plantar flexion exercises with the knee in extension with rubber tubing. Mini squats (0-45 degrees). No hamstring PREs; Calf ROM
- Weightbearing: 0%
- Modalities: EMG biofeedback quadriceps prn; EMS prn; cryotherapy
- Sports: none.
- CPM: cumulative of 6 hours per day for the first 6 weeks post-operative (1-2 hours at a time) with a ROM of 0-30 degrees.

Stage 2 (4 weeks-6 weeks):
- ROM: progress flexion as tolerated-10 degrees/week; no bracing for physical therapy and controlled range of motion exercises.
- Strength: PRE and SLR as above
- Weightbearing: 0%
- Modalities: as above.
- Sports: none.
- CPM: cumulative of 6 hours per day for the first 6 weeks post-operative (1-2 hours at a time) with a ROM of 0-30 degrees.

Stage 3 (6 weeks-4 months):
- ROM: Increase flexion to within normal limits; may remove brace for sleep at 8 weeks; no bracing for physical therapy and controlled range of motion exercises; wean completely from place by 3 months.
- 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: start at 25%, progress up to 100% by post-op week 10.
Modalities: as above.
Sports: steps-ups, rowing machine, swimming, and slide board

Stage 4 (4 months-6 months):
- ROM: Discontinue bracing.
- Strength: PRE-quad PRE into full extension with gradual transition
- Weight bearing: Initiate straight ahead jogging to ½ speed running as tolerated (IF APPLICABLE TO LIFESTYLE) (once 65% strength attained in hamstrings and quadriceps)
- Modalities: prn
- Sports: IF APPLICABLE TO LIFESTYLE, initiate straight jogging to ½ speed running (if applicable)

Stage 5 (6 months and beyond):
- ROM: as above
- Strengthening: as above
- Modalities: as above
- Sports (if applicable): 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.

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