TIBIAL FRACTURE
STATUS POST OPEN REDUCTION AND INTERNAL FIXATION

General Principles:
The total length of rehabilitation will vary depending on the following factors: severity or acuteness of injury, age, health or personal goals of patient.

PHASE I (Acute) Weeks 0 - 2

Weight Bearing
1. Progress as tolerated with crutches in orthosis to status ordered by physician.

Modalities
1. Ice and electrical stimulation.
2. Compression and elevation as needed to control pain and swelling.
3. Moist heat, warm whirlpool and/or pulsed ultrasound after 48 hours.
4. Ice for 20 minutes following exercises throughout protocol.

Orthotics
1. Tibial fracture brace per physician orders to be used for exercises and ADLs.
2. Less stable injuries may require a cast or splint per physician.

Exercises
1. Passive range of motion:
   a. Towel stretch for gastrocnemius and soleus.
   b. Gravity assisted knee flexion.
2. Active range of motion:
   a. Hip flexion, extension, abduction, adduction
   b. Wall slides
   c. Seated knee extensions
   d. Prone knee flexions
   e. Elevated ankle pumps
   f. Seated BAPS® board
   g. Toe curling.

Phase II Weeks 3 - 6

Modalities
1. Continue only as needed.

Orthotics
1. Tibial fracture brace for rehabilitation and sport/work activities.

Exercises
1. Continue/progress previous exercises.
2. Isometric quadriceps sets, hamstring sets in extension.
3. Heel lifts
4. Ankle plantar flexion and dorsiflexion.
5. Shuttle exercises per physician weight bearing restrictions.
6. Theraband™ exercises, light tubing.
7. Stationary bike and/or upper extremity bike for cardiovascular endurance.
8. Aquatics as needed
9. Balance and proprioceptive work as tolerated.
10. **Week 6:**
    a. Progress with resisted hip flexion, extension, abduction, adduction with resistance applied cephalad to the fracture.
    b. Progress with resisted knee flexion and extension with resistance applied cephalad to the fracture.
    c. May begin resistive ankle inversion and eversion exercises.
    d. Progressive resistive exercises as tolerated.

**PHASE III (Advanced) Weeks 7 - 10**

**Modalities**
1. Continue only as needed.

**Orthotics**
1. Continue as in Phase II.

**Exercises**
1. Continue Phase II exercises, advance resistance and duration as tolerated.

**PHASE IV (Return to Activity) Weeks 11 - 16**

**Modalities**
1. As needed for pain and swelling control.

**Orthotics**
1. Use functional brace for all activities unless discontinued by physician.
2. If physician approves, may discontinue brace for ADLs.

**Exercises**
1. Proprioceptive exercises
2. Plyometrics.
3. Begin jogging and functional activities follow physician approval.
4. Interval running program when physician approves.
5. Agility drills
6. Home exercise program.
7. Refer to fitness center.
8. Consider dismissal with physician approval.