TIBIAL SPINE FRACTURE FIXATION REHABILITATION PROTOCOL

PHASE I (Weeks 0-4)

Weight Bearing:

Partial weight bearing (50%) with crutches for 4 weeks

Hinged Knee Brace:

• Locked in full extension for ambulation and sleeping (Weeks 0–4)

Range of Motion (ROM):

- Begin active ROM at week 3
 - Week 3: flex to 20°
 - Week 4: flex to 60°
 - Week 5: progress to 90°

Therapeutic Exercises:

- · Quadriceps and hamstring sets
- Heel slides
- Non-weight-bearing gastrocnemius/soleus stretch
- Straight leg raise with brace in full extension until quadriceps strength prevents extension lag

PHASE II (Weeks 4–8)

Weight Bearing:

 Start full weight bearing and progress to full weight bearing by 6 weeks without crutches

Hinged Knee Brace:

- Unlock brace at Week 6
- Discontinue brace use when full extension is achieved with no extension lag or by Week 8

Range of Motion (ROM):

- Maintain full knee extension
- Work on progressive knee flexion

Therapeutic Exercises:

- Closed-chain extension exercises
- Hamstring curls
- Toe raises
- Balance exercises
- Progress to weight-bearing gastrocnemius/soleus stretch
- Begin use of stationary bicycle

PHASE III (Weeks 8-16)

Weight Bearing: Full weight bearing

Range of Motion (ROM): Full and painless

Therapeutic Exercises:

- Advance closed-chain strengthening exercises
- Proprioception activities
- Begin Stairmaster / Elliptical
- Straight-ahead jogging at 12 weeks

PHASE IV (Month 4-6)

Return to Activity:

- Gradual return to athletic activity as tolerated
- No cutting or pivoting sports until 6 months post-op

Maintenance:

Strength and endurance program