

Tibial Plateau Fracture: Open Reduction Internal Fixation (ORIF)

Physical Therapy Protocol

Phase I – Maximum Protection (0 to 1 Week)

0 to 1 Week

- Ice and modalities to reduce pain and inflammation.
- Non-weight bearing (NWB) with crutches for 12 weeks.
- Brace in full extension except during therapy sessions.
- Elevate the leg above the heart for the first 3 to 5 days.
- Patella mobility drills.
- Gait training focusing on NWB restoration.

Phase II – Progressive Stretching and Early Strengthening (Weeks 1 to 6)

Weeks 1 to 6

- Continue with the program outlined in Phase I.
- Use **modalities** to control inflammation.
- Begin gentle range of motion (ROM), goal to exceed 90° of knee flexion by 4 weeks.
- Closed kinetic chain multi-plane hip strengthening on the uninvolved side.
- Proprioception drills emphasizing neuromuscular control.

• Multi-plane ankle strengthening.

Phase III – Strengthening and Proprioceptive Phase (Weeks 6 to 12)

Weeks 6 to 12

- Use modalities as needed.
- Continue with Phase II exercises as indicated.
- Emphasize achieving and maintaining full ROM.
- Begin stationary bike and light strengthening exercises.
- Initiate weight-bearing as tolerated, progressing gradually.

Phase IV – Advanced Strengthening and Initiation of Plyometric Drills (Weeks 12 to 20)

Weeks 12 and Onward

- Begin partial weight-bearing at 25% of body weight, increasing by 25% per week.
- Gradually progress to one crutch as tolerated, eventually weaning off crutches.
- Normalize gait pattern once bearing full weight.
- Initiate closed kinetic chain exercises, progressing from bilateral to unilateral movements.
- Begin proprioceptive training exercises.



Phase V – Full Return to Activity (Weeks 20 and Beyond)

Weeks 20 and Onward

- Full return to activity as tolerated.
- Continue strengthening and proprioceptive exercises.
- Begin sport-specific drills and progressive load-bearing exercises.

Patient Education

- Emphasize the importance of following weight-bearing guidelines to avoid complications.
- Instruct patients on proper bracing, gait training, and managing swelling with elevation and cryotherapy.
- Educate on gradual return to activity, focusing on avoiding high-impact activities until cleared.

Red Flags

- Unusual pain, increased swelling, or discomfort should be reported to the healthcare provider.
- Any difficulties with weight-bearing progression or abnormal gait pattern should be addressed immediately.
- Persistent or increasing joint stiffness, particularly after 12 weeks, should be evaluated for potential complications.

Final Considerations

Follow all precautions to ensure a smooth recovery.

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- Gradual strengthening and controlled movement will maximize surgical success.
- Reach out to your healthcare provider if you experience concerns or setbacks.

How to Use This Guide

- Adhere to the outlined progression phases.
- Monitor pain and ROM improvements.
- Communicate any concerns to your surgeon or therapist.