

## Post-operative Rehabilitation Protocol

### Tibial Tubercle Osteotomy (TTO)

General Guidelines	<ul style="list-style-type: none"> <li>- Physical therapy should begin 5-7 days after surgery</li> <li>- You will be touch down weight bearing with crutches for 6 weeks after surgery</li> <li>- Rest, ice, compression, elevation recommended for first 48 hours</li> <li>- No running or impact activities until minimum 6 months after surgery and cleared by MD</li> <li>- Contact therapist or physician with any questions/concerns</li> </ul>		
	Range of Motion	Brace	Exercises
<b>Phase 1 – Early protection</b> Weeks 0 - 6	Okay for passive and active-assisted ROM 0 – 90°  Touch down weight bearing only	0-2 wks: Locked in extension full time and for sleeping. Okay to remove for CPM and PT 2-6 wks: Brace unlocked	<u>Exercises:</u> Quad sets, ankle pumps At 2 weeks, okay to begin floor-based core, hip and glute work and patellar mobs <u>CPM:</u> Begin at 0-30° → May advance 5° each day as comfortable. Do not exceed 90° unless otherwise directed by MD
<b>Phase 2 – Early Loading</b> Weeks 6 - 12	Progress to full Active ROM  Add 25% weight bearing every 3-4 days until full WB at 8 weeks.	Wean out of brace once good quad control	<u>Exercises:</u> Begin stationary bike at 6 weeks. Once normalized, pain-free gait → begin balance exercises, mini squats.
<b>Phase 3 – Strength</b> Weeks 12 - 16	Full, pain-free ROM	None	<u>Exercises:</u> Progress strengthening. Begin single leg strengthening/balance. Add elliptical at 12 weeks. Advance bike resistance. Build walking endurance
<b>Phase 4 – Resume activities</b> Weeks 16 - 24	Full, pain-free ROM	None	Progress phase 3 exercises. Focus on core/glutes. Progress single leg dynamic and static balance and strength. Light plyometrics
<b>Phase 5 – Return to Sport</b> Weeks 24+	Full, pain-free ROM	None	May begin light jogging at 6 months post-op if no pain or swelling and cleared by MD. Sport-specific training.