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POST-OPERATIVE REHABILITATION PROTOCOL

Tibial Tubercle Osteotomy

Weeks 0–12 (Phase I) PROTECT THE OSTEOTOMY

- Weightbearing

GOALS WB per protocol

0–6 Weeks

- Toe-touch weight bearing (TTWB)

6–8 Weeks

- Progress WB slowly to FWB with crutches; brace/ROM

0–2 Weeks

- Brace locked in full extension for all activities (remove for hygiene)

2–4 Weeks

- Unlock brace, progress ROM as tolerated

6–8 Weeks

- Wean out of brace when full WB; exercise

0–6 Weeks

- Quad sets, patellar mobs, SLRs, ankle pumps, resisted ankle movements

6–12 Weeks

- Progress exercises, partial wall sits, progress knee ROM, Stationary bike

10–12 Weeks

- Hamstring strength, light open chain exercises



Weeks 12–16 (Phase II) MOTION & GAIT

- Full WB and full gait normalized gait pattern without crutches; no brace; begin treadmill walking at slow pace
- Progress balance and proprioception exercises

GOALS Full ROM

Months 4–5 (Phase III) BUILD STRENGTH

- Advance closed chained exercises, strength; focus on single leg strength; progress walking and backward movement
- Initiate light plyometrics

GOALS Single-leg control

Months 5–6 (Phase IV) RETURN TO SPORT

- Continue strengthening, emphasize single leg loading; progress running/agility program
- Return to high impact activities at 6–9 months if ok per Dr. Kelly

GOALS Impact progression

Return to Sport & Discharge Criteria

- Full ROM with no extensor lag; no effusion
- Quad strength $\geq 90\%$; hop symmetry $\geq 90\%$ where sport demands
- Return to sport when cleared by Dr. Kelly

Time frames are guidelines — progress when phase goals are met, per Dr. Kelly and the treating therapist.

