

## ISOLATED TIBIAL TUBERCLE OSTEOTOMY (TTO) REHABILITATION PROTOCOL

	<b>WEIGHT BEARING</b>	<b>BRACE</b>	<b>ROM</b>	<b>EXERCISES</b>
<b>PHASE I</b> 0-2 weeks	Heel touch only	<b>0-2 weeks:</b> Locked in full extension at all times*  Off for hygiene and exercises	0-90 as tolerated	Quad sets, SLR in brace, calf pumps, modalities, passive leg hangs to 90°
<b>PHASE II</b> 2-8 weeks	<b>2-6 weeks:</b> Heel touch only  <b>6-8 weeks:</b> Advance 25% weekly until full	Unlocked during day 0-90, off at night  Off for hygiene, rest, and exercises  Discontinue after 6-8 weeks when WB comfortably	Advance as tolerated	PROM/AAROM to tolerance, patella and tibiofibular joint mobs  Begin floor based core and glute/quad/hamstring exercises  <b>6-8 weeks:</b> Addition of heel raises, closed chain lower body, gait normalization, eccentric quads/hamstrings; advance core, glutes and pelvic stability  Begin stationary bike as tolerated after 6 weeks
<b>PHASE III</b> 8-12 weeks	Full	None	Full	Progress closed chain activities  Begin hamstring work, lunges/leg press 0-90°, proprioception exercises, balance/core/hip/glutes
<b>PHASE IV</b> 12-16 weeks	Full	None	Full	Progress Phase III exercises and functional activities: walking lunges, planks, bridges, swiss ball, half-bosu exercises  Advance core/glutes, balance, flexibility  May advance to elliptical, pool as tolerated after 12 weeks
<b>PHASE V</b> >16 weeks	Full	None	Full	Slowly advance all activity as tolerated  Progress to functional training, including running, jumping, pivoting, and sports activity after 16 weeks

\*Brace may be removed at night after first post-operative visit (day 7-14) if directed