ORTHOINDY
BONE·JOINT·SPINE·MUSCLE

Troy Roberson, MD
Orthopedic Sports Medicine Surgeon
[P] 317.275.6193 • [F] 317.802.2868
TroyRobersonMD.com

Tibial Tuberosity Osteotomy (AMZ, Distalization, Medialization) Rehab Protocol

Description of Procedure: Tibial tuberosity osteotomy (TTO) involves a cut of the tibial tuberosity, affecting centralization of patellar-tracking alignment. TTO involves a flat cut of the tibia adjacent to the tibial tuberosity. The free tuberosity pedicle is then moved (anteriorly, medially or distally), which affects patellofemoral alignment. The tuberosity is fixated with screws. The goal is to centralize patella tracking, improve PF contact area and decrease PF force.

Safety Warning: Quadriceps weakness may persist many days. Until full quadriceps function is present, collapse and fall are risks to be avoided.

	Weight Bearing	Brace	ROM	Therapeutic Exercise
Phase I: 0 to 6 Weeks	**Medialization:** Minimal weight bearing on crutches for 2 weeks then gradual increase **AMZ and Distlalization:** Minimal weight bearing on crutches for 6 weeks then gradual increase	Worn when patient is up; discontinue brace once independent straight leg raise can be performed and patient is confident on crutches/ walker	Progress to full, active flexion and extension as soon as possible	**0 to 2 Weeks:** SLR (all 4 planes), quad/ hamstring sets, seated knee flexion, heel slides, prone hangs, supine heel props, patellar mobilizations, stationary bike as comfort and ROM permits (high seat, no resistance), core proximal program **2 to 6 Weeks:** Continue exercises listed above; scar massage and patellar mobilization
Phase II: 6 to and Beyond	Progression to full weight bearing with normalized gait pattern; no limping	None	Full and pain-free	Maintain full ROM; begin WB exercises: Isometric closed kinetic chain multi-angle exercises (pushing foot against floor/wall in sitting; standing CKC activities (shuttle/ leg press); thera-band hip flex, extension, abduction, adduction with involved leg WB; Swiss ball stabilization program- bridging progression, prone hamstring curls, side-lying hip abduction/adduction, prone hip extension progression Functional progression to desired activity/sport

- *CPM used if concomitant cartilage restoration performed at the time of osteotomy.*
- *Progression back to sport is dependent on case per case basis and determined by Dr. Roberson. If pain or swelling occurs patient is expected to stop causative activity and follow-up with our office.*
- *Leg extension exercises with resistance are not allowed indefinitely.*