

Standard Proximal Tibial Osteotomy/Distal Femoral Osteotomy Rehabilitation Protocol

Phase	Goals	Precautions/Restrictions	Treatment
Weeks 0 – 6	<ul style="list-style-type: none"> • Protect surgical site • Full ROM • Reduce muscle atrophy • Reduce swelling • Decrease pain and inflammation 	<ul style="list-style-type: none"> • ROM: Progressive as tolerated • TWB with the knee in full extension using crutches • Immobilizer must be on at all times when walking 	<ul style="list-style-type: none"> • PRICE <ul style="list-style-type: none"> ○ Cryotherapy: 5-7 times per day ○ Compression with TubiGrip/TEDS • ROM: Gradual, progressive <ul style="list-style-type: none"> ○ Heel slides ○ Patella mobilizations • Quadriceps recruitment • Global LE and proximal hip musculature activation/strengthening • Gait training with crutches • Initial Visit: FOTO, LEFS
Weeks 6 – 12	<ul style="list-style-type: none"> • Discontinue knee immobilizer • Full ROM • Reduce atrophy/progress strengthening • Reduce swelling • Normalize gait • SLR without extensor lag 	<ul style="list-style-type: none"> • Progress to WBAT <ul style="list-style-type: none"> ○ Week 6: 1/3 body weight ○ Week 7: 2/3 body weight ○ Week 8: Full body weight with assistive device ○ Week 9+: Full body weight without assistive device • No jogging or sport activity • Avoid painful activities/exercises 	<ul style="list-style-type: none"> • ROM: As tolerated • Gait training with/without assistive device • Core stabilization exercises • Neuromuscular re-education • Global LE strengthening <ul style="list-style-type: none"> ○ Limit knee flexion angles 0-60 degrees ○ Begin functional strengthening exercises (bridge, mini-squat, step up, etc) • Double limb to single limb balance/proprioception • Aerobic training: <ul style="list-style-type: none"> ○ Alter-G treadmill walking ○ Pool, once all incisions healed ○ Stationary bike • Week 6: FOTO, LEFS
Weeks 12 - 16	<ul style="list-style-type: none"> • No effusion • Full ROM • Increase functional LE strength • Return to activity as tolerated 	<ul style="list-style-type: none"> • Progressive loading at greater knee flexion angles • No jogging or sport activity • Avoid painful activities/exercises 	<ul style="list-style-type: none"> • Aerobic training <ul style="list-style-type: none"> ○ Begin non-impact aerobic training (elliptical / stairmaster) • Increase loading capacity for lower extremity strengthening exercises • Continue balance/proprioceptive training • Aerobic training: <ul style="list-style-type: none"> ○ Alter-G treadmill walk/jog ○ Pool, once all incisions healed ○ Stationary bike/elliptical/stairmaster • Week 12: FOTO, LEFS

This protocol is not meant to be prescriptive but a recommendation to guide the rehabilitation process. Each patient's progress may vary based on specifics of their injury and procedure.

Weeks 16+

- Full ROM
- Functional strengthening
- Initiate return to jogging/running program
- Initiate basic plyometrics
- Return to sport/activity
- No jogging until week 16 and cleared by surgeon
- No jogging on painful or swollen knee
- No intensive plyometric exercises until week 20 and cleared by surgeon
- Return to sport 6-8 months post-op with surgeon approval
- Gradually increase lifting loads focusing on form, control, and tissue tolerance
- Progress as tolerated: ROM, Strength, Endurance, Proprioception/Balance, agility, Sport specific skills
- Week 16: begin return to jogging/running program with MD clearance
- Week 20: begin higher level plyometric and agility training with surgeon clearance
- Week 16: FOTO, LEFS

This protocol is not meant to be prescriptive but a recommendation to guide the rehabilitation process. Each patient's progress may vary based on specifics of their injury and procedure.