



The Children's Hospital



CGMA

Center for Gait and Movement Analysis

PT17: Distal tibial rotational osteotomy

Indications: Internal or external tibial torsion

Procedure: Rotational tibial and fibular osteotomy with internal hardware fixation

Casting: Short leg cast for 6 weeks total, non weight bearing for week 1-3, weight bearing as tolerated for week 4-6

Healing Time: Approximately 6-8 weeks

Precautions:

- Child will be in a short leg cast for 3 weeks post op followed by weight bearing as tolerated after the 3rd week.
- Child with spasticity may experience increased spasms / discomfort when cast is removed and movement at the ankle / foot is initiated.
- Avoid aggressive / forceful range of motion initially.

Contraindications:

- No impact, torque or unprotected weight bearing for the first 3 weeks post-op
- Minimize risk for falling

Phase 1: Post-op day 1-7

- Goals:
- protect the surgical site, both skin incision and bony healing, non weight bearing for the 1st 3 weeks post-op
 - Pain management may include use of ice, heat and/or electrical stimulation for pain modulation only
 - Patient and family demonstrate safe mobility and transfers for ADL completion
 - Patient and family demonstrate understanding of post-op precautions and home exercise program
 - Passive, active assistive and active range of motion of the hips and knees
 - Isometric contraction of the gluts, quads, hamstrings
 - functional balance when standing for transfers, ADLs

Criteria to Progress:

- safe mobility and transfers for completion of ADLs

Phase 2: Post-op day 8-21

- Goals: -pain management as needed – may be a priority with spasticity

Criteria to Progress:

- independent with transfers, ADLs and mobility

Phase 3: Post-op 22 to completion of PT care

- Goals:
- begin progressive weight bearing as advised by the referring physician
 - functional standing balance for safe transfers
 - avoid impact, torque, reduce the risk for falling
 - assess need for bracing, assistive devices
 - begin transverse friction massage/scar mobility at ~ 6 weeks post-op/ when incision healing is complete
 - full ROM bilateral lower extremities, all planes, all joints
 - lower extremity strengthening with emphasis on glut max, glut med, calf as well as **quality** of gait pattern
 - Return to pre-operative function and activity

When multiple procedures are performed at the same surgical event, the post-op physical therapy care needs to default to the most conservative time frames and guidelines.