



CGMA

Center for Gait and Movement Analysis

PT16: Distal femoral rotational osteotomy

Indications: Femoral anteversion or retroversion

Procedure: Femur is rotated at the distal femoral metaphysis and fixed with internal hardware, either plates or wires

Casting: Long leg or cylinder cast with derotation spreader bar or abduction pillow for 3 weeks, then new long leg casts for 3 additional weeks with partial weight bearing if sufficient bony healing after the first 3 weeks

Healing Time: Approximately 6-8 weeks

Precautions:

- If child is in long leg casts with a spreader bar, do **not** lift child by holding onto the spreader bar.
- Child with spasticity may experience increased spasms / discomfort when cast is removed and movement at the knee is initiated. Periodic use of a knee immobilizer or bivalved cast may be helpful as the child is weaned from support.
- Avoid aggressive / forceful range of motion initially.
- If adequate healing is noted 3 weeks post op, MD may allow partial weight bearing during weeks 3 - 6 while wearing cylinder or long leg casts. At 6 weeks post op, check with MD if full weight bearing can be resumed.

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
 - Pain management which 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 ankles
 - 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:
- avoid impact, torque, reduce 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
 - begin progressive weight bearing as advised by the referring physician
 - functional standing balance for safe transfers
 - 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.

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