

PT14: Chiari Pelvic Osteotomy (child with neurological impairment)

Indications: Hip subluxation or dislocation with acetabular dysplasia

Procedure: Periarticular pelvic osteotomy above acetabulum with entire acetabulum shifted medially and fixed with hardware

Casting: Hip spica cast 3-6 weeks, non weight bearing until cast is removed. Slow progression of weight bearing if safe with good control of the operative lower extremity with minimal risk for falling

Healing Time: Approximately 6-8 weeks

Precautions:

- Since patient will be in a cast for 3 - 6 weeks, weight bearing status will need to be determined by MD (bony integrity at time of surgery & radiographs) once cast has been removed
- Child with spasticity may experience increased spasms/discomfort when cast removed and movement at the hip & knee initiated. Also, spasticity may draw lower extremities into a "set" position (eg. flexion) and may make it difficult/painful to regain range/mobility in the opposite direction (eg. extension). Periodic use of the bivalved cast may be helpful during this transition (eg. nighttime, short times during day, etc.)
- Avoid aggressive/forceful range of motion initially.
- Children who were non weight bearing pre-op may be osteopenic and fixation of the surgical hardware may be limited. Special care must be taken during exercise and progressive weight bearing activities.

Contraindications:

- Non weight bearing for 3-6 weeks** – initiation of weight bearing will depend on bony healing, bone density, radiograph findings – this will be guided by the MD

Phase 1: Post-op day 1-7

- Goals:
- address splinting, positioning and assistive device needs for ADLs
 - mobility and transfer training for completion of ADLs, hygiene
 - pain management during treatment sessions – may include cold packs, heat application, massage, modalities
 - balance training for safe completion of transfers, mobility

Criteria to Progress:

- safe mobility and transfers fro completion of ADLs
- parent and patient understanding of post-op precautions and home exercise program

Phase 2: Post-op day 8-21

Goals: -pain management as needed

Criteria to Progress:

- safe mobility and transfers
- parent and patient understanding of post-op precautions and home exercise program

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

- Goals:
- Avoid impact, torque activities, reduce risk of falling
 - full AROM all joints with good active control of the lower extremities
 - return to pre-op functional mobility including transfers, gait
 - functional balance

- parent and patient education in home exercises
- total LE endurance and strengthening exercises with emphasis on abdominals, gluts, calf
- assess bracing needs for upright posture during walking
- begin transverse friction massage/ scar mobility if surgical scars are well-healed

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.

Revised 10/07