



The Children's Hospital



CGMA

Center for Gait and Movement Analysis

### PT18: Evans calcaneal lengthening

Indications: Plano-valgus foot deformity with midfoot break and talo-navicular subluxation

Procedure: Calcaneal osteotomy between the anterior and middle facets with interposition of the tri-cortical iliac crest allograft or donor graft. May require internal fixation

Casting: Short leg cast for 6 weeks. **Non weight bearing** for the 1<sup>st</sup> 3 weeks, weight bearing as tolerated for the 2<sup>nd</sup> 3 weeks

Healing Time: Approximately 6-8 weeks, UCB orthosis (custom shoe insert) for 1 year post-op

Precautions:

- Child will be non weight bearing in a short leg cast for 3 weeks and weight bearing as tolerated weeks 4 - 6 using a walker or crutches. Once cast is removed, child should wear a UCB for 1 year post op.

Contraindications:

- Avoid impact activities until 8 weeks post-op

Phase 1: Post-op day 1-7

Goals: -protect the surgical site, both skin incision and bony healing, non weight bearing for the 1<sup>st</sup> 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 of 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.