About Surgery to Align Your Child's Foot (Triple Arthrodesis or Foot Fusion)

WHY IS MY CHILD'S FOOT ALIGNMENT IMPORTANT?

Poor alignment of the bones in the foot can make it difficult for your child to walk, move or stand. A poorly aligned foot may cause your child pain. Wearing braces or shoes may be difficult as well.

WHY SHOULD MY CHILD HAVE SURGERY?

- To improve walking skills
- To improve posture or positioning while standing, sitting or moving
- To reduce pain
- To make it easier to wear braces or shoes



Foot formations that may benefit from surgery to improve alignment.

ABOUT TRIPLE ARTHRODESIS OR FOOT FUSION

A foot fusion (arthrodesis) involves multiple joints and bones of the foot. During the operation, the surgeon realigns the foot by cutting out certain joints and connects the bones together. Hardware holds the bones in place so they fuse together in the new position. Every child's foot fusion surgery is tailored to their specific needs.

After the surgery, a cast is placed on your child's foot and lower leg to allow the foot to heal in the new position. This surgery may require a short stay in the hospital.



Joints within the foot can be locked in place surgically.

RECOVERING AT HOME

Before surgery, your care team will prepare you and your child for daily activities **while they are unable to put all of their weight on their foot.** This includes instructions for safely bathing, dressing and moving around after surgery while wearing a lower leg cast.

Follow all instructions for limiting your child's activity while they are healing. Make sure to avoid overstretching or bearing weight on the foot.

It is common to have leg pain or be uncomfortable in the first few weeks after surgery. Your child may also have spasms or jerky movements as their foot heals.



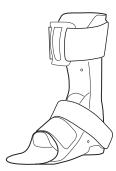
A cast holds the foot in place during healing.

FOLLOW-UP APPOINTMENTS

Your child will have an appointment 2 to 4 weeks after surgery to remove the cast and check the wounds. At that time, they will be fitted for a foot brace (also known as an ankle-foot orthotic). Your child will get a new cast to wear while the brace is being made. It takes about 2 weeks to receive the new brace.

Once the new brace is ready, your child will come to the clinic and have the second cast removed. You and your child will be shown how to properly wear the new brace.

It is important that your child wear the new brace according to instructions from their surgeon to help support the foot and ankle during the healing process.



Ankle-foot orthotic





Guidance for Your Therapist and Care Providers: Post-Op

FOOT FUSION/ TRIPLE ARTHRODESIS

Immediate Post-Op through End of Week 6

RESTRICTIONS & IMMOBILIZATION

- · Short leg cast
- · Non-weight bearing for 6 weeks
- · Avoid activities that would cause cast to become wet or submerged in water

THERAPY FOCUS (Instruction provided by inpatient PT prior to hospital discharge – wait for Outpatient PT until weight bearing restrictions are lifted)

- Safe mobility with assistive device and compliance with non-weight bearing status (calcaneal slide osteotomy: Weightbearing as tolerated [WBAT])
- Focus on strengthening all LE muscles excepts ankle dorsiflexors, plantarflexors, and foot intrinsics on the surgical side
- Home exercise program provided by PT for LE strengthening (except muscles noted above)
- Protect the surgical site including the incision and underlying surgical tissues

CRITERIA TO PROGRESS

- Uneventful bone healing of the surgical site(s)
- Clearance from surgical team to initiate outpatient physical therapy after 6-week follow up with Ortho
- Proper fit of solid AFO once cast is discontinued

Week 6 to Completion of Care

RESTRICTIONS & IMMOBILIZATION

- · WBAT with AFO until cleared by surgical team
- Can remove AFO for PT non-weight bearing exercises at 6 weeks
- WB without AFO in PT 8-10 weeks
- Continue AFO for long distances outside of PT for 6 months

THERAPY FOCUS

- Surgical scar mobility to begin once good wound closure has occurred (about 6 weeks)
- Active ankle range of motion in all planes
- Lower extremity strengthening with specific attention to ankle dorsiflexion, ankle plantarflexion (concentric and eccentric), inversion, eversion and foot intrinsics
- Safe to add resistance training after 12 weeks and when patient demonstrates full active range of motion in all planes
- Gait training with AFO until cleared by MD. Global focus on heel-toe gait pattern
- · Neutral foot alignment in supervised standing
- Home exercise program to focus on strengthening and maintaining range of motion in all planes
- Anticipate full return to baseline function at about 3-6 months post-op (with AFO) / 1 year (without AFO)

© 2023 Texas Children's Hospital. All rights reserved.