Lateral column lengthening of the foot

What is the procedure?

The lateral column refers to the bones along the outside of the foot. In order to lengthen the lateral column, the surgeon makes a cut in one of the bones near the heel and then inserts an extra piece of bone (bone graft). The bone graft is often taken from the top of your child’s pelvis, which means there will be another incision near the hip. The procedure straightens and stabilizes the foot. The surgeon will use K-wires (fine surgical wires) or plates and screws to hold the bone graft in place and the foot in alignment until fully healed. The K-wires will be removed after 6 weeks whereas the plates/screws may stay in place.

Why is it necessary?

This procedure can be beneficial when the foot is unstable, turns outwards instead of pointing forward, has pressure sores or is painful during walking. Pain or thickened skin often develops at prominent bones on the inside of the foot as a result of too much pressure. Instability of the foot, poor alignment of the foot and pain can make walking more difficult. If your child wears an ankle foot orthosis (AFO), this surgery can improve comfort and fit of the AFO and reduce rubbing or pressure areas.
What happens during a hospital stay?

**Pain management**

Your child will be asleep and will be under anaesthesia for their operation. Upon waking, your child will be given pain medicine and possibly muscle relaxants. Any surgery creates some pain, but your child will be given medication to manage this. Pain management in hospital is done either by a nerve block, a drip or oral medicine.

**After surgery**

Your child will have a below knee plaster, which will usually stay on for six to nine weeks. During the first few days the leg will need to be elevated while resting. Your child will not be allowed to weight bear after surgery, depending on the preference of the surgeon. There could be a non-weight bearing period of six to eight weeks after the surgery. Your child may need to use crutches, a walking frame or a wheelchair to get around initially after surgery.

**Caring for your child at home**

The plaster is not allowed to get wet at all. When showering or bathing, the plaster needs to be covered with plastic. You can use a large plastic bag (with no holes) and tape. If the cast gets wet please contact your surgical team immediately.

In order to prevent pressure areas, your child should change positions regularly. Ensure that the heel of the cast is not resting on any surfaces — the leg can be propped up with cushions to minimise the risk.

Your child may need other equipment to help with daily tasks such as showering and toileting. Your occupational therapist will assist you with this in hospital.

Your physiotherapist will give you exercises to do with your child at home. If your child normally walks, your physiotherapist will assist with walking as soon as their doctors allow.

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**Important considerations**

It is very important for your child to wear an AFO (ankle foot orthosis) all the time after surgery; this may be for a period of at least 3 months full time and likely for longer while walking. However most children require long term AFO use. This helps the bones to continue to heal properly, and ensures the new corrected foot position is maintained. If it is not worn, the foot deformity can return. The surgeon will determine when it is appropriate to cast for new AFO’s.

**Remember:**

- Make sure that your local therapist knows about the upcoming surgery.
- If your child is not currently seeing an OT or Physio, please contact your local service now to go on the waiting list. Please make sure you let the service know when your child is having surgery.
- Please advise your child’s school that your child will be having surgery and they could be off school for several weeks. The school may also need to consider how your child can safely return to school whilst in a plaster and using a wheelchair or crutches.
- Please think about advising your own work that you may need time off around the surgery date. Also let family and friends know who may be able to help out at the time of surgery.