

Foot Fusions

Why does my child need this surgery?

This surgery is mostly for children whose feet have become extremely flat because of tight muscle tone (spasticity) that pulls the foot muscles and bones out of shape while they are growing. This is not the same as children who start out with flat feet as babies and gradually develop arches when they start walking.

If a doctor has recommended foot fusion for your child, you may already have tried braces. Braces may have helped at first. But as a child grows and the feet become stiffer, braces can be uncomfortable and make it hard to walk.

What happens during this surgery?

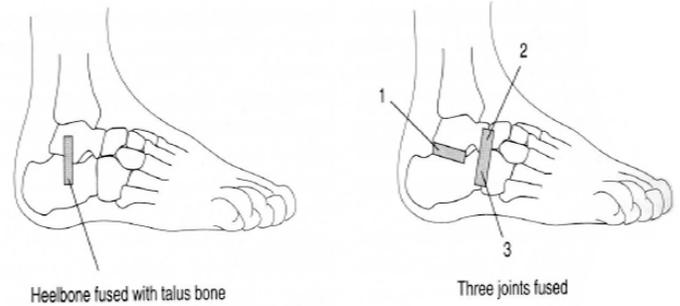
Foot fusion surgery can be done several ways, depending on a child's age and how badly their foot is deformed:

- For children who are good walkers and do not have a severe flat foot, the surgeon will probably just lengthen the heel bone (calcaneus). This is called the lateral column approach.
- If the problem is more serious and the child is struggling to walk, the doctor may do a subtalar fusion. In this procedure, the heel bone (calcaneus) is joined (fused) to the ankle bone (talus).
- Children with very severe flat feet are usually in a wheelchair. They may need a fusion technique for three joints of the foot: heel bone to ankle bone, navicular to ankle bone, and cuboid to heel bone. (The navicular and cuboid bones are two of seven bones on the outside of the foot.)

All three procedures usually involve bone grafts (a procedure that replaces missing bone) as well as screws, staples or small plates.

What are the incisions like?

The surgeon makes incisions on the outside and the inside of the foot.



What happens after surgery?

The feet are put in casts — usually short leg casts — in the operating room. A day or two after surgery, a cast technician will turn the casts into walking casts. This process, called “soling,” is done in the cast room.

Casts typically stay on for six to eight weeks. Your child will have an X-ray in the cast three to four weeks after surgery. The doctor will then decide if the cast can come off. For most children, it will stay on two to four more weeks. As soon as your child is comfortable, the care team will encourage them to stand up to move to the wheelchair and to the potty.

Will my child have pain?

Yes, your child will need pain relievers and muscle relaxants at first. Our staff is trained to help make patients as comfortable as possible. Once you go home, please call the office if pain is a problem or the pain medication your child's doctor prescribed causes side effects.

Will my child be able to walk and do other activities once we go home?

In the beginning, your child will need a little help to stand and walk. This period may last longer if the surgeon had to operate on muscles to help the muscles relax. If foot fusion was the only surgery, many children can walk in their casts within a week. Most other activities are fine as long as the casts stay dry.

Will my child be able to ride in the car?

Yes. We recommend raising (elevating) the feet most of the day and night to help reduce swelling. But in the car, the feet can dangle.

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Will my child need physical therapy?

In the beginning, physical therapy helps with getting up and about in the casts. Therapy is also very important when the casts come off. A Nemours social worker will help you arrange therapy. You can help by asking your insurance provider in advance what your coverage is for physical therapy. Please try to do this before surgery if you can.

When will my child need to return to see the doctor or get X-rays?

The first visit is usually three to four weeks after surgery. Your child will get X-rays in the casts to see how the bones are healing. A cast technician will check the casts and may replace them.

When will my child be able to return to school and the school bus?

As soon as your child is comfortable, they can return to school. Ask the teacher to help your child elevate the feet (prop them up) for comfort during the school day. A walker or wheelchair can be helpful in the early days of recovery. Your child can ride the school bus as long as it is comfortable for them to do so.

How long will it be until my child has completely recovered?

After the casts come off, full recovery may take weeks or months. The time it takes to recover varies, but your child should improve steadily over time.

Will this surgery ever need to be repeated?

If a child is young when they have a foot fusion, another surgery may be necessary when the foot is fully grown.

What are the possible complications with this surgery?

An infection can happen with any surgery. Most are minor, treatable with antibiotics and do not delay recovery. In some cases, a fusion doesn't "take," meaning that the bones do not grow together. This is called a non-union. Non-union doesn't happen often, but if it does, another surgery will be necessary. Occasionally, the hardware (screws, staples, small plates) used in surgery begin to irritate the foot. Irritation like this usually starts late in the healing process. By then, the hardware is no longer needed and can be removed.