Planning for What to Expect: Tissue Expansion

Children who have a medium-to-large/giant nevi or other skin defect might need tissue expansion. We also frequently use expanders for nevi located in the scalp/face/neck area. The expanders:

- Allow for expansion of healthy surrounding skin in preparation for removal and repair of the skin defect.
- Help minimize scarring, producing a better appearance.

How are expanders inserted?

To insert an expander, we make an incision within the skin defect itself. We place the expander under the skin, in the area of healthy tissue next to the nevus. At the time of insertion, we may or may not inject the expander with normal saline (a sterile solution) to begin expansion. If the area of expansion is too tight, the first injection might not take place until the follow-up appointment. The procedure is performed under general anesthesia and requires an overnight stay.

How long will the expanders be in, and how frequently are they injected?

Expansion appointments begin 1-2 weeks after insertion. You will come into clinic once a week until the expanders are removed. Typically, they’re removed about 6-8 weeks after insertion. However, if the nevus is large/giant, we might expand up to 3 months - as long as there are no signs or symptoms of infection. Our goal is to get the maximum amount of expansion with the fewest number of operations for your child.

What happens if it “bursts” inside my child?

Rarely, an expander leaks and appears deflated or flattened. If you think this has happened, contact our office immediately. The expanders would be surgically removed and the area rinsed with antibiotic wash before closure.

We use sterile normal saline during all injections. If any saline has leaked out of the expanders, it should not cause any serious problems or complications since the body absorbs saline.

Can my child feel the expander?

Your child might sense that there is something “different” at first. Typically, expanders are not uncomfortable and most children tolerate them well. There might be some discomfort during injection that feels like stretching or fullness. We recommend giving your child one dose of Tylenol before appointments. Also, we’ll send a numbing cream home with you. Place a generous amount of cream at the injection site one hour before your follow-up appointments.

How do I know where to apply the numbing cream?

There are two types of expanders.
One has a satellite port. It is a small, dome-shaped port and has tubing attached to a balloon. All of this is under the skin. You will be shown how to feel and look for the ports before discharge.

The second type of expander has an integrated port. This port is built into the expander, and has a metal backing. We'll send a small magnet home with you that will direct you to the exact area to place the cream.

Why is my child fussy after injections?

Children must be gently held or distracted during injections to protect them while we are injecting. Typically, parents hold children in their laps and a nurse helps restrain the expansion area until the needle is inserted. Then the nurse will give the child some space until the expansion is done. The amount of restraint needed depends upon how active the child is; we take every precaution to protect your child from injury.

- Restraint often is the most upsetting part of the process. Child life specialists might be asked to help distract children during this procedure.
- Children also experience a stretching sensation during expansion that can be uncomfortable. This should not last more than a day. You can use Tylenol for discomfort. Please let your surgeon or the nurse practitioner know if the discomfort lasts longer.
- If numbing cream hasn’t had enough time to work before the appointment, inserting a needle can be painful. Be sure to place a generous amount of cream on the port site at least one hour before your appointment. Don’t rub it in. Be generous with it. If it’s in an area that your child can reach, cover it or have someone help you watch your child. Avoid getting it in the eyes and mouth.

The expansion looks so odd. Will it cause permanent deformity?

No. The expander is designed to expand healthy tissue, which is then transferred to the area where the nevus is removed. It all happens in one procedure. The expanded skin is not “cut off” and moved; rather, it is stretched over. Once this process is finished, the skin to the area heals and adheres to the underlying tissue and creates a smooth appearance.

What about scars?

The original scar made when the expander was placed will be removed when the nevus is excised (surgically removed). The size and shape of the scar from excision depends on the location and size of the skin defect. Your surgeon can give you an idea of what it may look like before it’s removed.

If children have giant nevi, it can be challenging to create a result that looks good. These children generally have multiple procedures of expander replacement, expansion and removal. With each excision, care is made to remove as much of the old scar as possible.

What else do I need to watch for?

If you notice any of the following, call our office as soon as possible:
• The expanded area looks suddenly deflated (flat)
• The incision is reddened, bleeding or draining
• The expander area is red or tender
• The incision appears to be opening
• Your child has a fever
• You have any other concerns

Make An Appointment
651-290-8707
Refer a Patient
651-325-2200