Tissue Expansion

Tissue expansion is a way for doctors to stretch skin and soft tissues. This extra skin and soft tissue can be used to fix or replace other skin anywhere on the body. Expanded tissue may be used to fix skin that has been injured, burned, or scarred. It may be used to stretch nearby skin before a surgery to remove large birthmarks or other lesions.

Surgery

The expander will be put under your child’s skin in surgery (Picture 1). This surgery can be done with your child as an outpatient or admitted overnight. Your child’s doctor will decide.

A wound check will be done one to three weeks after the operation. After that, your child will be coming to the Plastic and Reconstructive Surgery office weekly so the expander can be filled with sterile saline (safe to use in the body) to stretch the skin.
Process of tissue expansion

Just below the surface of the skin near where the expander is placed, there will be a small button called a “port” (Picture 2). This port is connected to a tube, which is attached to the expander. The sterile saline is added through the port. Sometimes, an anesthetic cream will be rubbed on the skin over the port to numb it. A thin needle will be inserted into the center of the port after about an hour when the skin is numb. Extra sterile saline is injected into the expander through the needle in the port.

Care at home

Monitor for any of these signs or symptoms of infection:

- redness around the port site
- redness surrounding the expander
- fever
- swelling around the tissue expander
- incision opening
- pus from the incision.

For a day or two after the expander is filled, your child might experience some discomfort. You can give acetaminophen (Tylenol®) or ibuprofen for pain. Follow the directions on the bottle or ask your child’s doctor how much medicine to give.