

Pump Implantation

The Day of Surgery

Arrival

Our Perianesthesia staff greets you upon arrival. Your child is weighed and asked to change into a hospital gown. We also check temperature, pulse and blood pressure.

For ITB pump replacement and revision, we'll place an intravenous (IV) tube upon arrival to give the patient antibiotics and decrease the likelihood of infection after pump implantation. A **child life specialist** uses toys, crafts or movies to help your child feel more at ease.

Surgery Preparation

Next, patients and families meet with the ITB pump implantation team: the operating room nurse, **neurosurgeon**, nurse anesthetist and anesthesiologist. This is time for you to raise any questions or concerns—the anesthesiologist discusses how anesthesia and pain medication are used during surgery. You might talk about your child's experiences with pain and request medication or other techniques to help decrease anxiety.

Surgery

Right before ITB pump implantation, the neurosurgeon marks the places on your child where incisions will be made. Next, your child goes to the operating room—one family member can accompany your child as they receive anesthesia. Your child inhales anesthesia through a mask or receives it through an IV tube. When your child is unconscious, we insert a breathing tube. If we haven't placed an IV tube previously, we do it now. Your child receives anesthesia and fluids through the IV tube during and after the implantation—our expert staff monitors breathing throughout the procedure.

The neurosurgeon fills a small pump with baclofen and inserts it under the skin of your child's abdomen, but above the muscle, near the waistline.

The neurosurgeon connects a catheter (a narrow, flexible tube) to the pump and routes it under the skin to your child's back. A second incision is made to position the tip of the catheter in the intrathecal space, where it will deliver the baclofen directly to the fluid-filled area surrounding the spinal cord.

A **rehabilitation medicine** physician or nurse practitioner uses an external programmer to set the pump to begin delivering the right dose for your child. From this point on, the pump continuously dispenses baclofen into your child's intrathecal space.

Coming Out of Surgery

After ITB pump implantation, your child starts out in the Postanesthesia Care Unit (PACU)—this is where they wake up and you join them. Shortly afterward, nurses ask your child about pain and provide medication for pain management and comfort if needed. The neurosurgeon meets you in the PACU to discuss the procedure and next steps.

Your child then moves to the Rehabilitation Unit.

Shortly after pump implantation, you might notice temporary changes in your child's appearance. For example, their face and hands might be puffy due to body position during surgery. There might also be redness around your child's eyes and lips. That's because we often place protective tape over the eyes and around the mouth to keep the breathing tube in place.

Your child wears an abdominal binder for six to eight weeks to support the pump and prevent swelling as it heals. Your child will get an X-ray as a baseline to document the pump and catheter's positions.

After Surgery

Most kids stay in the hospital for five to seven days after having ITB pump implantation. Your child might feel weak after the procedure—and might have some discomfort for a few days at the incision areas on the abdomen and back.

Your child must lie flat for up to three days after pump implantation. Lying flat in bed minimizes the risk of fluid leaking near the point at which the catheter enters the intrathecal space surrounding the spinal cord.

Physical therapists visit your child once they can tolerate increasing the bed's head height and angle—typically three days after pump placement. The physical therapist helps your child get back to doing their usual activities and prepare for the transition to home.

Throughout your child's stay, rehabilitation specialists will assess muscle tone and discuss your child's condition with you to make decisions about the appropriate intrathecal baclofen dose.

Before Going Home

You'll receive specific guidelines and tips before you leave the hospital. Here are some important things for you to remember once you get home.

- You must notify your child's primary and other health care providers that a pump has been implanted—this is important for them to know if they prescribe medication or perform tests and procedures.
- Your child must always keep a pump registration card with them. The card contains information on the pump's reservoir size, dose, low reservoir alarm date and refill date.
- Your child must obtain an identification bracelet indicating that they have an intrathecal baclofen pump. Other caregivers need this information in case of an emergency.
- You will learn the difference between **noncritical** and **critical** alarm sounds from the pump. If a noncritical event occurs, your child is still receiving baclofen. If a critical event occurs, the patient isn't getting baclofen—making it an emergency.

Make An Appointment

651-290-8707

Refer a Patient

651-325-2200

This information is for educational purposes only. It is not intended to replace the advice of your health care providers. If you have any questions, talk with your doctor or others on your health care team.

If you are a Gillette patient with urgent questions or concerns, please contact Telehealth Nursing at **651-229-3890**.