

BACLOFEN PUMP (Intrathecal Baclofen Therapy - ITBTM)

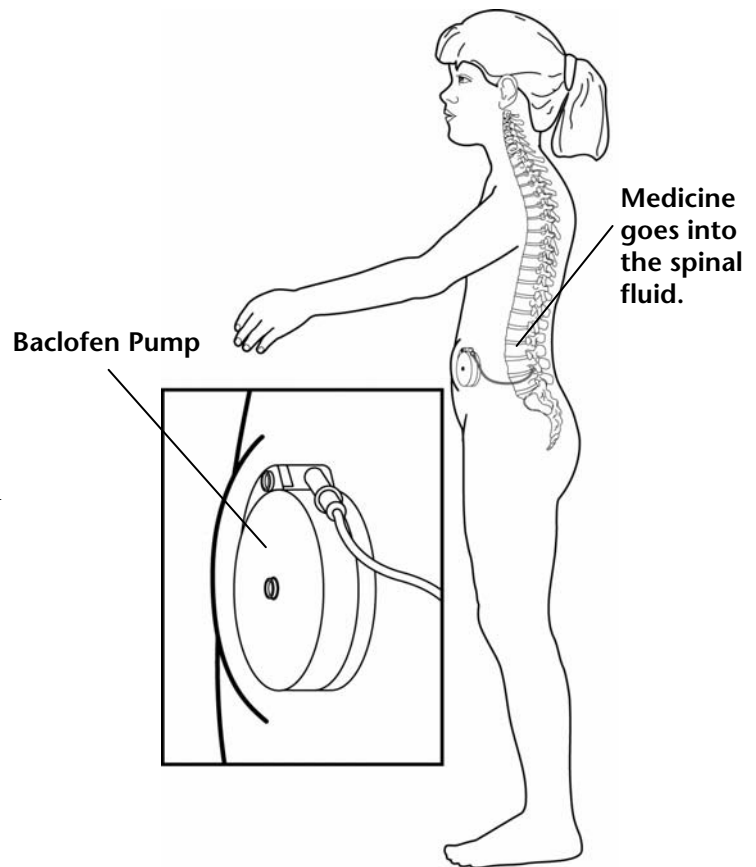
ITB Therapy is Intrathecal Baclofen (in-tra-THEE-cal BACK-loe-fen) Therapy. This type of treatment uses a catheter (tube) and a pump that are placed in the body during surgery. The pump sends a dose of medicine called baclofen (Lioresal®) directly into the fluid that surrounds the spinal cord. The medicine decreases the muscle tightness that makes the arms or legs bend, jerk, or twitch. It also relieves pain from spasms, clonus (rhythmic jerking), and muscle stiffness.

ITB therapy is different from medicines taken by mouth. It puts the medicine right where it is used (the fluid-filled area around the spinal cord (the intrathecal space). This helps reduce the side effects that may occur if this drug is taken by mouth.

SCREENING TEST FOR ITB THERAPY

A screening test is needed to see if your child qualifies for ITB therapy. Your child will be admitted to the hospital for the screening test. Most children stay only one day. Some may need a second or third test at a higher dose of medicine.

- Your child's doctor will inject a small dose of baclofen to see if your child responds to the medicine. The medicine is injected through a small needle that is placed in your child's lower back. Your child may feel weak, drowsy, or numb for a short time during this process.
- After the medicine is injected, the health care team will watch your child for several hours. The medicine may take one to two hours before your child's muscles start to relax. Your child could start to feel the medicine's full effect about four hours after the injection. It usually lasts between six and eight hours.
- After the medicine wears off, your child will have the same amount of spasticity that was present before the test. Some children may have a temporary increase or rebound of their spasticity.
- During this screening test your child's health care team will often check vital signs. This is to make sure there are no side effects from the medicine. They will also check the amount of spasticity in your child's muscles.
- If the test dose makes your child's muscles relax a lot, this shows a positive response. It means that your child may be able to have ITB Therapy. Talk with your child's doctor about the possible side effects and complications from the medicine and surgery.



Picture 1 The baclofen pump is implanted under the skin.

WHAT HAPPENS AFTER THE SCREENING TEST

After your child's screening test is complete, the doctor will talk with you. Together you can decide if your child may have ITB therapy. If your child's muscles do not loosen during the screening, you and the doctor may want to repeat the test with a higher dose of medicine. If the muscles loosen during the second screening test, your child may go on to the next step to receive ITB therapy.

Your child's doctor will refer your child to a neurosurgeon to discuss surgery to place the ITB pump.

THE ITB PUMP

The ITB pump is a round metal device about one inch thick and three inches across. It weighs about 6 ounces. It is implanted just under the skin of the abdomen (Picture 1). The battery-powered device stores the medicine. The catheter is a flexible tube that connects to the pump. It sends medicine from the pump to a specific place along your child's spine.

THE PUMP PROGRAMMER

Your child's doctor or nurse will use a programmer to "talk to" your child's pump. The programmer lets your child's doctor or nurse program the pump to give your child the right amount of medicine. It also reads information from the pump.

CARE AFTER SURGERY

- After surgery your child will have some discomfort and tenderness where the pump and catheter are implanted. The doctor may prescribe medicine to relieve the pain and antibiotics to prevent infection.
- Your child will be given an abdominal binder to wear around the waist for four to six weeks after surgery.
- Your child's doctor may tell you to limit your child's activity for four to six weeks after surgery.
- Your child should not take a bath or shower until the doctor allows it.
- After the incision has healed, the pump site needs no special care.

WHAT TO WATCH FOR

Tell your child's doctor or nurse:

- If you see any swelling, pain or redness near your child's incisions
- If your child has a fever.

THERAPY MAINTENANCE

One of the most important things to remember about your child's pump is **to keep your child's doctor appointments for follow-up care**. These appointments will be more often at first, but will be farther apart as time goes on. At these clinic visits the pump will be refilled with medicine and the dose will be adjusted. Your child's doctor or nurse will also check the pump to make sure it is working properly.

- At these appointments, the pump will be emptied and refilled by a needle inserted through your child's skin and into the pump.
- Your child's doctor may give your child a prescription for EMLA® cream (a numbing cream). Have the prescription filled before coming to the clinic.

OTHER THERAPY MAINTENANCE (Continued)

- One hour before your appointment to refill the pump, place a dab (the size of a nickel) of EMLA® cream on the skin on top of the pump. Cover it with a clear plastic patch to hold the cream in place. This will numb the skin.
- The doctor or nurse will let you know how often your child needs to get the pump refilled.
- After each clinic visit, stop at the clinic registration window to make the next pump refill appointment. **This is very important**



Picture 2 Call the doctor if you see signs of overdose.

- You may be given a prescription for baclofen to be taken by mouth. You may need to use this if your child's doctor instructs you to give it in an emergency. **Do not give any of the baclofen by mouth unless instructed to do so by your child's doctor.**
- The pump has an alarm that beeps softly. The beep means that the pump should be refilled or the battery is low.
- The pump battery lasts 4 to 7 years, depending on how much medicine your child gets each day. Before the battery runs out, your child will need surgery to have the pump replaced with a new one. Usually the catheter can stay in place and be connected to the new pump.
- Your child should carry the pump ID card and emergency cards with him at all times, as well as baclofen tablets in case of pump problems resulting in not enough medicine being delivered.

WHEN TO CALL YOUR CHILD'S DOCTOR

Call your child's doctor at (614) 722-5050 if:

- Your child has signs of drug overdose: very loose (floppy) muscles, very sleepy, trouble waking your child, breathing problems, dilated pupils, seizures, vomiting.
- Your child has signs of drug withdrawal or under dose: increased muscle tone, itching without a rash, sweating, pinpoint pupils, irritability).
- You hear the pump alarm.

If you have an urgent pump problem and need to call your child's doctor after hours, call the Nationwide Children's Hospital operator at (614) 722-2000 and ask that your child's doctor be paged.