

Intrathecal Baclofen Pump

Answers to Frequently Asked Questions

What is an intrathecal baclofen pump and how does it work?

- An intrathecal baclofen pump is a device that pumps the medicine 'baclofen' into the spine.
- The area around the spinal cord is called the intrathecal area and is filled with spinal fluid. A tube connected to the pump puts the medicine directly into this intrathecal area.
- Baclofen treats muscle spasticity by making the muscles relax.
- Your child will need surgery to put the pump inside his or her body. The pump is made of metal and is put under the skin of the belly near the waistline.
- The pump comes in two sizes: 20ml and 40ml. Your child's doctor will decide which size will work best for your child.

Why is intrathecal baclofen more effective than oral baclofen?

When baclofen is taken by mouth:

- it must travel through the body before it reaches the correct area
- less medicine gets to the areas that need it
- your child would likely have more side effects like being sleepy, groggy, and constipated, and may have more seizures.

When baclofen is put into your child's spine:

- it goes directly where it needs to go
- your child will have fewer side effects, since the baclofen does not go into the bloodstream.

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What are some possible goals for intrathecal baclofen treatment for my child?

Our goals for your child are:

- looser muscles
- less pain from muscle spasms
- preventing deformed joints and permanent loss of joint movement from untreated spasticity
- easier care, such as being able to dress your child or change your child's diaper since muscles are looser
- the muscles might work better and your child might have better motor development.

How do I know if the baclofen pump will help my child?

We will do a baclofen pump test at the hospital before the pump is placed. During the test, we insert a needle into your child's back (called a 'lumbar puncture') to put baclofen directly into the spinal cord area. One of our physical therapists will test your child before and after the baclofen injection to see if your child responds well to the medicine. We also want your feedback on how baclofen affects your child.

If your child has a good response to intrathecal baclofen during the test and you want to go ahead with the pump implant, an appointment will be scheduled with a neurosurgeon to talk about the pump placement surgery.

Once the pump is placed, how long will it take for intrathecal baclofen to help my child?

It can take from several weeks to months to find the right dose of baclofen for your child.

How often will I need to bring my child to the Intrathecal Baclofen Clinic?

After the pump is placed, you will need to bring your child to the clinic every 2 to 3 weeks. We use a computer in the clinic to tell the pump what dose to give, so we have to see your child in the clinic to slowly increase the pump rate until the right dose is reached.

After reaching the right dose, your child will need to come to appointments for pump refills and if there are concerns about the dose.

Appointments at the Intrathecal Baclofen Clinic are very important and should not be missed. Your child could have serious complications if he or she misses an appointment.

Will the pump need to be refilled with medicine?

Yes. We refill the pump in our clinic; your child will not need another surgery for this. During the refill procedure, we carefully clean your child's belly and insert a needle through the skin into the pump to put more medicine into it. Numbing cream can be used to lower pain from the needle stick.

Refill appointments are very important. If the pump runs low or runs out of medicine, your child could have withdrawal symptoms and may need to be admitted to the hospital.

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The time between refills depends on how high your child's pump rate is. Refills could be needed every month, or up to every 6 months.

Will the pump need to be replaced?

Yes. The pump typically needs to be replaced every 4 to 7 years.

Can my child have an MRI with a baclofen pump in place?

Yes, but it needs to be done at Vanderbilt so a provider from the Intrathecal Baclofen Clinic can check the pump to make sure it is working correctly after the MRI.

Are there side effects or complications with intrathecal baclofen?

The most common side effects are loose muscles, nausea, vomiting, sleepiness, headache, and dizziness. These are usually temporary.

Other complications can happen if there is a problem with the pump or catheter. These include:

- infection
- not getting enough baclofen and having withdrawal symptoms, including itching, blood pressure changes, sudden increase in stiffness, a lot of sweating
- getting too much baclofen; symptoms include drowsiness, cannot wake up, difficulty breathing, seizures, loss of consciousness.

The pump has an alarm that sounds if the pump is running low on medicine or has stopped. If you hear an alarm, it is an emergency and you need to bring your child to Vanderbilt right away.