

Using an ethanol nerve block to reduce spasticity

An ethanol nerve block is a treatment to reduce spasticity in your child's legs. Your health care team will discuss this treatment and answer any questions you may have. Reading this information sheet can also help you decide if this treatment is a good choice for your child.

What is an ethanol nerve block?

It is an injection (needle) of diluted ethanol (a type of alcohol) close to the nerve that controls your child's leg muscles (the ones that make the legs cross).

This is how it works:

- Ethanol strips off the layer of fat that covers the nerve at that spot. This slows down the signals from the nerve to the muscle that make the muscle contract (tighten). Like putting in a speed bump!
- As the muscle relaxes, movement becomes easier. This helps your child with walking, personal care like dressing or diaper changes, and therapy.

How is this treatment done?

- This treatment is usually done in the 3D area of McMaster Children's Hospital. Your child will need sedation, a medication to help them sleep and not feel any pain during the nerve block. The entire procedure (sedation and nerve block treatment) will take about 30 to 45 minutes.
- To have sedation, your child's stomach must be empty. We will tell you when your child must stop eating and drinking before the procedure.
- The nurse will put an intravenous (IV) in your child's arm. The IV is used to give your child fluids and the sedation.
- When your child is asleep, the doctor will insert the needle in the groin and stimulate the nerve in your child's leg with a mild electrical current. This finds the exact spot (in the groin) where the ethanol should be injected. The right location is important for the treatment to be safe and effective.
- When the doctor finds the spot, they will inject ethanol through the needle.
- If your child needs treatment in both legs, the doctor will repeat these steps in the other leg.

Does my child need special care after the ethanol block?

No, when your child wakes from the sedation, they can do everything as usual. You should notice less spasticity right away.

How long does an ethanol nerve block work?

The effects can last 6 to 9 months. If needed, the treatment can be safely repeated.

What side effects are possible?

Some side effects are possible at the injection site (where the needle went in). The most common are:

- redness
- bruising
- numbness
- pain
- a tingling feeling

Side effects are temporary and should go away in a few days.

You may give your child acetaminophen (Tylenol[®]) to relieve pain.

How much does ethanol cost?

One 5 ml vial of ethanol is used for one treatment (both legs).

As of January 2016, a vial costs about \$65. The hospital will send you a bill for this, as the Ontario Health Insurance Plan (OHIP) and private health insurance do not cover this cost.

Please note that the cost of a vial may change without notice.