

All About Intrathecal Catheters and Pain Relief

Part One: Things to Think About

Sometimes, when you have problems getting good pain relief, we suggest you have medication through an **intrathecal catheter**.

When medications are given this way, much lower doses are needed and usually you have fewer side effects.

What is an intrathecal catheter?

An intrathecal catheter is a very fine plastic tube that is tunneled under the skin and into the space directly surrounding the spinal cord (the intrathecal space). You can be given pain-killers through the catheter that can work directly on the nerves that are sending the pain messages. The tube is then connected to a pump called a CADD which will give you the pain medication.

Why have an intrathecal?

- Pain-killers delivered this way are over 100 times stronger than when you take them by mouth. This means they are much more effective and can be taken in smaller doses.
- Lower doses of medications mean fewer side effects like constipation, sleepiness, confusion and nausea.
- This method of giving pain-killers is especially good for nerve pain that is hard to treat.
- Some medications work better when given this way.

What will it cost?

There may be a cost for you for the procedure and the ongoing medication. You need to discuss this with your pain specialist, the pharmacist and your health fund (if you are privately insured).

Questions you should ask include: What out of pocket costs will there be to have the catheter or port put in? What out of pocket costs will there be to buy ongoing medication supplies?

How and where it is done?

The catheter is inserted by a pain specialist in a hospital operating theatre or procedure room.

You may be awake during the procedure, but you may be given some medication to make you sleepy and to relax the muscles, and a local anaesthetic to numb the skin.

It is usual to have an intravenous 'drip' in your arm for some extra fluids, and you may be given antibiotics as a precaution to prevent infection.

The intrathecal catheter is held in place with some stitches, which are usually taken out after a few days. A clear dressing is used to cover it so it can be looked at easily.

There are two types of intrathecal catheter – one that is tunnelled through the skin, or a catheter that is attached to a small reservoir under the skin called a 'port'. If you have a port, a needle is put in to give the medication. This needle needs to be changed every 2 weeks. The first few times that the needle is put in, it can hurt a little bit, but usually this passes and most people hardly feel the needle at all, even when it is in place. If you have a tunnelled catheter it sits on the skin and doesn't require a needle.



What happens after it is put in?

You will stay a little while in the recovery section of the theatre, then the orderly will take you back to the ward that you came from. After the procedure, and to reduce any side effects, nursing staff will check you regularly for the first 24 hours. They will check your pulse, blood pressure and the dressing, and any other symptoms that may be causing you problems. Tell the nurse if you are worried about anything that you are feeling.

Once the catheter is in place it will be connected to a small pump which is about the size and weight of a small book. This pump gives you the medication slowly and also lets you give yourself booster shots for times when you may have extra pain. You will need to carry the pump around with you in a small bag that can be worn like a “bumbag” or on a strap over the shoulder.

Your pain specialist will give you a little dose of the medications to start with to see how your body reacts as everybody is different. We will ask you about your pain, and may need to increase your dose.

It is usual for the medications to be changed a few times to find exactly the right mix for you. This may take a few days, so please be patient as you will need to stay in hospital while this happens.

If your pain is not good, it is important for you to tell the doctor and nurses looking after you. The doctors can then increase the amount of medicine you are getting.

Once your pain is good, and you and your doctor are happy, you can go home.

What are the side effects

from the insertion of the catheter?

- Bruising and soreness for a few days
- Very occasionally slight bleeding can occur but this is nothing to worry about
- Leakage of fluid from around the catheter, this usually stops within a week
- Headache (especially if there is some leakage) which can be helped with caffeine
- Infection of the skin around the catheter or in the spine (known as meningitis) – the catheter may need to be removed for a while if this happens

from the pain-killers being infused?

- Numbness, tingling or weakness of the legs
- Itchiness
- Difficulty passing urine (sometimes a catheter to drain the bladder is necessary)
- Difficulty sensing the urge to open the bowels
- Sleepiness
- Nausea
- Confusion
- Twitching
- Low blood pressure which may make you a bit dizzy when you stand up.

If any of these occur, then the medications can be adjusted and in many cases, the side effects reduced or stopped.

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Part Two: At Home

What to do when you are home

When you go home you will have community nurses to help you look after the catheter and pump. It is also important that you keep careful watch for any problems and tell your nurse as soon as possible. You will need to come back to see your specialist occasionally, so that they can make sure that everything is going well.

Usually, you can do most of your normal activities at home, but don't do too much.

You cannot swim or take a bath with the catheter - this is too risky for the pump and for infection. You can shower though.

Managing your pain

Use the DOSE button when pain begins or before you want to do something that you know will give you pain. If you press the DOSE button and you don't hear two "beeps" you have to wait a little while. If you note the time when you use the DOSE button, you will know when the next dose is available.

Let the nurse know if the medication is not helping enough, or if you get tingling or weakness in your legs.

If you are feeling a bit dizzy or have numbness in your legs or feet you may need help getting about and may need to use a walking aid like a frame or wheeled walker.

Be careful with things that are very hot (like hotpacks or heaters), or cold or sharp if you have any numbness, as you may not notice that they are hurting you.

What you need to do every day:

- Make sure your hands are clean and dry before touching any part of the dressing or catheter.
- Check each connection and make sure they are firm but don't over-tighten.
- Look at the dressing over the catheter or port – use a mirror to make sure you see it well.
- Check to see if the skin underneath is dry, and not red.
- Look for any wetness under the dressing.
- Check the corners of the dressing to make sure they are not lifting up and peeling off.
- Does it look like it usually does? If you have a needle, is it in its usual position?
- Feel the dressing and the skin under and around the dressing. Does it feel sore or is it swollen or hot?
- Check and untwist the tubing regularly.
- Check the amount of medication left (Res Vol). Let the nurse know if it is less than 50 ml.

What to do when you are:

Up and about doing things

Keep the pump in its bag and wear it over your shoulder or as a “bumbag”. This way you can do things freely and you won't forget it.

Resting in a bed or chair

Keep wearing the pump as that way you will not forget it when you get up.

Sleeping

Keep the pump next to you on the bed or under the pillow.

Bathing and showering

Put the pump into a plastic shopping bag (you can reuse the same one) and use a metal coat hanger to hang it onto the shower or towel rail.

What you need to tell the nurse about

- Fever temperature over 37 degrees C – make sure you have a thermometer
- Feeling cold, sweaty or generally unwell
- Headache
- Blurred vision or sensitivity to light
- Pain not relieved by the medication or if you are needing a lot more doses to help your pain
- Difficulty passing urine – only being able to pass small amounts at a time or not at all
- Cough or soreness in your chest
- Redness, swelling, tenderness or possible infection anywhere on your body
- The amount of medication left (Res Vol) is less than 50 ml and you don't have a spare bag or cassette of medication ready in your home.

What happens if...

You drop the pump in the water?

Take the pump out of the water quickly and dry it off with a towel and call your nurse.

You drop or hit the pump on a hard surface?

Check that the pump is still running. If pump has stopped - restart it by holding down the STOP/START button until the three dashes --- --- --- disappear.

Check the battery cover and make sure it is in place

If you can't get pump to work, or you are worried about anything - ring the nurse

The medication is running out...

The hospital pharmacy will prepare the medication for you.

They will need at least 24 hours notice to do this.

Your community nurse will help you to work out when you will need to order more medication.

You or a friend or family member will need to collect the medication from the hospital pharmacy.

If you have a port, and think that you have damaged the port by hitting or falling onto it.....

If the pump is not alarming, and the needle looks fine and not leaking and your pain is OK, it is unlikely you have damaged the port. If you are worried about anything ring the nurse.

A bit about the CADD-Legacy pump

(if you are provided with a different pump – ask your nurse for instructions on your pump)

The pump runs on batteries. These need to be alkaline – not Heavy Duty, as these will interfere with the working of the pump.

Always have at least 2 new spare batteries handy. The batteries usually last somewhere between 7 and 14 days.

How and when to change the battery on a CADD-Legacy pump

- Stop the pump. Hold down the STOP/START until --- --- --- appears
- Remove old batteries and insert new
- You should hear a squeal noise if the new batteries are OK
- If the new batteries are low in power the pump will alarm
- The pump will give a few beeps while it “powers up”
- Replace the battery cover
- Hold down the STOP/START button. until the --- --- --- disappears completely
- Pump will make several more beeps while it goes through its programme
- “RUN” will appear on screen when all is OK.

Please ask the doctors and nurses looking after you any questions or concerns that you or your family may have.

References:

CADD-Legacy PCA Operator's Manual (2007), Smiths Medical

Oxford Textbook of Palliative Medicine 3rd Ed (2005) Doyle, Hanks, Cherney and Calman, Eds, Oxford University Press

Authors:

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