

Intrathecal drug delivery system

Pain Management Patient Information Leaflet

Introduction

Welcome to The Dudley Group Pain Management Service. This leaflet will provide you and your relatives with information about an intrathecal drug delivery system. It includes what this is, the benefits and risks and what happens during the procedure.

What is an intrathecal drug delivery system?

It is a device that can be implanted by surgery under the skin of your abdomen (stomach area). It allows drugs to be delivered directly into the intrathecal space of the spine to give pain relief. This is the space where the fluid flows around the spinal cord and brain.

An intrathecal drug delivery system is made up of the following parts:

- The catheter – through which the drugs are delivered from a pump to the spine. This is a small, soft tube connected to the pump at one end and the other end is placed in the intrathecal space.
- The pump – this is a round, metal device that stores and releases set amounts of medication into the intrathecal space through the catheter.

It is about one to two centimetres (half to one inch) thick and about seven and a half centimetres (three inches) in diameter. It weighs about 170 grams (six ounces). It is made of titanium which is a light, medical grade metal. The volume of drugs that can be contained in the pump depends on the model of pump implanted.

The insertion of an intrathecal drug delivery system is a reversible procedure. Therefore it can be taken out, if needed, without causing damage to your spine or spinal cord.

You will already have had trials and discussions about whether this type of pain management is suitable for you and will be on the waiting list for this type of treatment.

How are the drugs put in?

The drugs are injected into the pump through your skin via a filling entrance in the centre of the pump, using specific refill kits designed for this purpose. Each implant has its own refill kit.

You will need to visit the hospital at regular intervals for the implant to be refilled. How often you have to do this will depend on the type and strength of medication you are having and the make of pump.

What are the benefits?

The spinal cord can be likened to a highway for pain signals travelling to the brain, where the feeling of pain is experienced by the body. The medication goes straight to the site of action in the spinal cord, where the pain signals travel.

Therefore, this type of system offers some people significant pain control with much lower doses of medication than they would normally take orally (by mouth). This can minimise the side effects that you often experience with tablets.

What are the risks?

As with any surgical procedure, the insertion of an intrathecal drug delivery system has some risks. It is important that we make you aware of these.

Risks of having a general anaesthetic

- Reaction to the anaesthetic drugs used to put you to sleep
- Chest infection after the procedure. This is more likely if you smoke
- A heart attack

Risks of the intrathecal drug delivery system

- Infection – this can be just around the operation site or throughout your body. If the infection is throughout your body, it can cause meningitis
- Bleeding
- An abnormal collection of blood outside a blood vessel if you have a lot of bleeding. This is known medically as a haematoma
- Headache
- Problems with the implant system itself
- Spinal cord injury
- Drug-related side effects including sleepiness, constipation, upset stomach
- Weight increase which, although small, may be noticeable
- Decreased sex drive – occasionally patients who have these types of medication have reported problems with sexual function and a reduced sex drive. This is due to medication and if the medication is stopped, it should no longer be a problem
- Allergic reactions

- Failure to relieve the pain
- Paralysis
- Increased or new pain at the implant site
- The catheter may move or become blocked

Although every effort is made to minimise the risk of this procedure, we cannot guarantee that you will not have any of these side effects.

X-ray precautions:

- The procedure uses X-rays and these use a small amount of radiation which may add slightly to the normal risk of cancer.
- Every effort is made to keep radiation doses low. The amount of radiation you are exposed to during the procedure is the equivalent to between a few months and a few years of exposure to natural radiation from the environment.

For more information visit:

<https://www.gov.uk/government/publications/medical-radiation-patient-doses/patient-dose-information-guidance>

Female patients – due to the use of X-rays during the procedure, you must tell us if you are or might be pregnant before you come for the procedure. If you are not sure, we will offer you a pregnancy test.

What are the alternatives?

You do not have to have this procedure and your consultant will discuss alternative treatments with you appropriate to your condition. If you prefer, you can continue to take painkilling medication without having any other treatment.

How is the procedure carried out?

The first stage involves inserting the catheter into the intrathecal space, using X-rays to guide the surgeon to the exact area. This is carried out using a local anaesthetic to numb the area so you will be awake during the procedure.

Once the catheter is in the correct place and secured, we will give you a general anaesthetic for the second part of procedure, so you will be asleep.

During this part, the surgeon makes a cut into the skin in your stomach area (abdomen). The surgeon forms a pocket to take the pump. It is usually two to three centimetres deep.

The pump and intrathecal catheter are linked by a supply catheter. This is tunnelled underneath your skin from your back to the pump in your abdomen.

Once the pump pocket is ready and the catheter is connected to the pump, the wounds are closed with surgical staples. These are usually removed one week later.

How long will I be in hospital?

You will be in hospital for about a week.

What happens after surgery?

It is quite normal to have pain after this type of procedure in both your back and abdomen. Bruising is common. You may have discomfort for up to six weeks.

It is important to remember that the system will not relieve this pain as it is from surgery. Therefore, you will need to take other pain relief (always read the label; do not exceed the recommended dose).

What should I do at home?

At home you should gradually increase your level of activity. It is advisable to have someone with you for the first few weeks after your procedure as you gradually build up your activity. **Do not** take up any new exercise or do exercise you are not used to. **Avoid overdoing it too soon.**

Remember to have correct posture at all times. Avoid lifting heavy objects and twisting your body round, always face the object that you need.

If you do not do any exercise to improve your general fitness and well-being, you may not feel any major benefit from this treatment. Please remember, this treatment only manages your symptoms; it is not a cure for your pain.

Follow up

We will ask you to come back to see members of the pain team about three to four weeks after the procedure to see how you are getting on.

A representative from the implant company may also get in touch with you. For some systems, they are the first place to call if you have a problem with the function of the system. For any other problems, contact the pain management team.

What if I have problems?

You can contact the clinical nurse specialists in the pain management team (9am to 5pm, Monday to Friday) by:

- Calling **01384 244735** and leaving a message on the answerphone or
- Ringing the switchboard number 01384 456111 below and asking them to bleep the number 5064

Out of these hours, you will need to contact your GP or NHS 111.

Can I find out more?

The following website has more information on intrathecal drug delivery systems:

The British Pain Society

<https://www.britishpainsociety.org/british-pain-society-publications/patient-publications/>

If you have any questions, or if there is anything you do not understand about this leaflet, please contact:

Clinical nurse specialists in pain management on 01384 244735 or ring the switchboard number and ask them to bleep the number 5064 (9am to 5pm, Monday to Friday)

Russells Hall Hospital switchboard number: 01384 456111

This leaflet can be downloaded or printed from:

<http://dudleygroup.nhs.uk/services-and-wards/pain-management/>

If you have any feedback on this patient information leaflet, please email patient.information@dgh.nhs.uk

This leaflet can be made available in large print, audio version and in other languages, please call 0800 073 0510.

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此宣传单可提供大字版本、音频版本和其它语言版本，请拨打电话：0800 073 0510。

Ulotka dostępna jest również w dużym druku, wersji audio lub w innym języku. W tym celu zadzwoń pod numer 0800 073 0510.

ਇਹ ਪਰਚਾ ਵੱਡੇ ਅੱਖਰਾਂ, ਬੋਲ ਕੇ ਰੀਕਾਰਡ ਕੀਤਾ ਹੋਇਆ ਅਤੇ ਦੂਸਰੀਆਂ ਭਾਸ਼ਾਵਾਂ ਵਿਚ ਵੀ ਪ੍ਰਾਪਤ ਹੋ ਸਕਦਾ ਹੈ, 0800 073 0510 ਤੇ ਫੋਨ ਕਰੋ ਜੀ।

Aceasta broșura poate fi pusă la dispoziție tipărită cu caractere mari, versiune audio sau în alte limbi, pentru acest lucru vă rugăm sunați la 0800 073 0510.

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