

Spinal injections

The aim of this leaflet is to help answer some of the questions you may have about having a spinal injection. It explains the benefits, risks and alternatives, as well as what you can expect when you come to hospital. If you have any questions or concerns, please do not hesitate to speak to a doctor or nurse caring for you.

What is a spinal injection?

Your spine is made of a number of bones called vertebrae. They are connected to one another allowing your spine to move and protecting the spinal cord and nerves. These strong interconnections are made up of intervertebral discs (which act as your spine's shock absorbing system) and facet joints (which connect the vertebrae to one another). Due to a variety of reasons, these structures can wear down and, with time, can be a cause of pain.

Spinal injections deliver medicines into or near your spine, normally around the source of your pain. There are two medicines used in spinal injections:

- **local anaesthetic** which is used to block pain from the injected area
- **steroid** which is used to reduce swelling and inflammation in the injected area. The local anaesthetic injection gives an immediate relief while the steroid injection takes effect.

The aim of a successful spinal injection is to ease your back or leg/arm pain, or sometimes both, for a period of up to three months.

There are four injection techniques that are commonly used by your doctor:

- **Epidural injection** targets the space that surrounds your spinal cord.
- **Facet or sacroiliac joint injection** targets the joints that link the bones of your spine.
- **Nerve root injection** targets individual nerves in your spine.
- **Discography** targets the intervertebral discs between the bones of your spine.

The type of spinal injection you have will be based on your specific symptoms.

What are the benefits – why should I have a spinal injection?

Spinal injections are used for **diagnostic** or **therapeutic** purposes.

A **diagnostic** spinal injection can sometimes help your surgeon to plan the long-term management of your condition. It is very useful when the source of your pain has not been clearly identified before, and can determine which spinal structure is causing your symptoms.

A **therapeutic** spinal injection improves your symptoms with the use of local anaesthetic and steroids which reduce swelling and inflammation. This can be repeated periodically if it works well and will allow you to progress with other treatments such as physiotherapy.

What are the risks of a spinal injection?

In general, the risks relate to the anaesthetic and the spinal treatment itself. Spinal injections are usually done under local anaesthetic (you will be awake but will not feel any pain) with some sedation (this relieves anxiety and helps you relax).

For more information about having an anaesthetic and sedation please see our leaflet, **Having an anaesthetic**. If you do not have a copy, please ask us for one. If you are having sedation, you will be able to discuss this with the anaesthetist before surgery and he/she will identify the best method for you.

Spinal injections are commonly performed and are generally safe. Before suggesting the treatment, your doctor will have considered that the benefits of the procedure outweigh any disadvantages. However, to make an informed decision and give your consent, you need to be aware of the possible side effects and risks/complications. If complications occur, they are usually mild and resolve after about three weeks.

Rare complications include:

- **Infection (affects around one out of every 100 patients treated):** this can be serious if the infection gets into your spine. If it occurs, you will need an intense intravenous (administered directly into a vein) course of antibiotics in hospital.

- **Bleeding (affects less than one out of every 100 patients treated):** Very rarely bleeding and/or bruising in the injected area may occur. This may cause increased pain for a few days. This can be serious if you take medicines that thin your blood because it can lead to an epidural haematoma (a localised collection of blood around your spinal nerves).
- **Headaches (affects less than one out of every 100 patients treated):** occasionally the spinal needle may puncture the outer covering of your spinal cord causing leakage of spinal fluid (CSF). This is not serious but it can cause a dull headache for up to a week and you will need to lie flat for at least three days after the treatment.
- **Spinal nerve injury (affects around one out of every 100 patients treated):** this can happen with nerve root injections or discography and is caused by the spinal needle being in contact with the nerve or more commonly the nerve sheath (protective covering of the nerves). This can lead to a temporary loss of feeling or muscle weakness in the legs or bladder/bowel dysfunction.
- **Increased pain in the treated area (affects around one out of every 100 patients treated):** this is usually temporary and lasts a few hours or a few days. If you experience increased pain several days after the injections, please contact us as it may be a sign of infection.

- **An allergic reaction to the injection (affects around one out of every 100 patients treated):** these will usually happen immediately so help is available. Most reactions are treated and cause no permanent harm. If you have any signs of an allergic reaction after you have left the hospital, please seek medical advice.

Like all medicines steroids may cause side effects, although not everybody will experience them. Some of the side effects you may have include hot flushes, feeling sick, mild abdominal pain, fluid retention, a temporary rise in blood sugar, and menstrual irregularities (in women). These should settle within a few days. If you have diabetes and your blood glucose level is not very well controlled, please let the person giving you the injection know. You are advised to check your blood sugar levels the evening after having the injections.

Can everyone have spinal injections?

No, some people are not good candidates for spinal injections. This includes those with:

- an active systemic infection (such as blood poisoning, chest or dental infection)
- a skin infection at the site of needle puncture
- a bleeding disorder or patients taking medicines to thin their blood (unless advised by the haematology team)
- a poorly controlled medical condition such as diabetes, high blood pressure or heart disease
- an allergy to contrast, steroids or local anaesthetic.

Are there any alternatives?

There are other pain-relieving therapies that can help ease back pain, such as pain-relieving medicines and TENS (transcutaneous electrical nerve stimulation) machine. Exercise, acupuncture, yoga/pilates and relaxation therapy may also help ease back pain.

How can I prepare for a spinal injection?

Please refer to the following leaflet which will provide information on how to prepare for your treatment:

- **The surgical admission lounge (SAL) at Guy's Hospital**

If you do not have a copy, please ask us for one or see our website at **www.guysandstthomas.nhs.uk** (type SAL in the search box).

During your pre-assessment, you should tell your nurse about any health conditions you have, such as diabetes or bleeding disorders, and about any medicines that you may be taking, including blood-thinning and over-the-counter medicines. You may be asked to stop taking certain medicines for several days before the procedure.

If you are a woman of child-bearing age, you must tell your nurse if you could be pregnant. If unsure, you will be asked to have a pregnancy test. Spinal Injections are not suitable for pregnant women because x-rays are usually used during the treatment. They are safe for adults, but may harm your developing baby. If you are pregnant, your doctor will talk about alternatives to the treatment.

Giving my consent (permission)

We want to involve you in decisions about your care and treatment. If you decide to go ahead, you will be asked to sign a consent form. This states that you agree to have the treatment and you understand what it involves.

You should receive the leaflet, **Helping you decide: our consent policy**, which gives you more information. If you do not, please ask a member of staff caring for you for a copy.

What happens during the treatment?

On the day of your treatment you will be seen by a surgeon who will ask you to sign the consent form. The anaesthetist may also review your fitness for surgery and finalise the planned anaesthetic regime. You will then be taken to the operating theatre or radiology suite for your treatment.

Usually you will lie on your stomach, but may also be asked to lie on your side with your knees drawn up and chin tucked in. This position helps to open up the space between the bones in your spine.

If you are having a sedative, the anaesthetist will inject it into a vein in the back of your hand.

After cleaning the injection site with a sterile antiseptic wipe, a local anaesthetic is injected. When the area has become numb, your doctor will carefully insert a thin, hollow spinal needle into your spine using an x-ray machine for guidance. If you are having your treatment in the radiology department, a CT machine

(computerised tomography machine which creates detailed images of the inside of your body) is used to guide the spinal needle.

You will not feel the needle going in, but once it has reached your spine, you may feel some discomfort. While the needle is being inserted, it is important that you do not move. This is because any movement makes positioning of the needle more difficult. Please tell your doctor if you feel any pain or discomfort that prevents you from lying still.

Your doctor will inject a contrast solution to improve the images of the internal body structures and ensure that the needle is positioned correctly. The local anaesthetic and steroids are then injected into your spine.

If you are having a discography, please let your surgeon know if you have any pain in your back or leg during the procedure.

When the treatment is finished, the doctor will take the needle out and cover the injection site with a plaster.

The treatment normally takes around 20 to 40 minutes to complete.

Will I feel any pain after the treatment?

You may have some tenderness at the needle insertion site. This will normally last for a few hours. You can place an ice pack on the area to reduce the discomfort, as often as you require but for no longer than 20 minutes at a time. You should never put ice directly on your skin as it can cause frostbite.

It is also common after this treatment to have an increase in pain for the first 24 to 72 hours. This occurs because the medicines are injected in an area where there is already inflammation. You should not be alarmed by this. Your symptoms should gradually improve in the days following the spinal injection.

The local anaesthetic will keep you pain-free for a while, but it is best to take things easy for the first 24 hours. After this, your back may start to feel sore again because the steroids take a few days to work.

The spinal injection can work up to three months before you feel some of symptoms recur.

What happens after the procedure?

Following the treatment you will be taken to the recovery department. This is where you are monitored for the initial post-operative period. You will then be transferred to the discharge lounge or to an orthopaedic ward (if you are staying overnight for medical reasons).

A nurse will make sure that you are safe to move around and that you have passed urine before going home. If you have any concerns about your walking or controlling your bladder/bowel, you must tell a member of staff.

You will need to arrange for a responsible adult to accompany you home.

What do I need to do after I go home?

It is essential that you continue to take painkillers as advised after your treatment. A pharmacist and/or nurse will discuss the management of your painkillers before you leave hospital.

The plaster can be removed after 24 hours and you can then have a bath or shower as normal. Before the plaster is removed, avoid getting the injection site wet.

Generally, there are no restrictions after your spinal injections once the post-treatment pain has settled down. You should be able to return to physiotherapy or other spinal exercises within a week of your injection. Depending on the nature of your employment, you may wish to return to work after 72 hours. Please ensure that your employer is happy with this arrangement.

If your pain does not settle within four to six weeks, you can either be reviewed in your scheduled outpatient appointment or you can contact your GP for advice and pain management.

What should I do if I have a problem?

Please contact your GP if you experience any of the following:

- **excruciating pain unlike your normal symptoms**
- **increasing redness, swelling or oozing around the injection site**
- **fever (temperature higher than 38.5°C)**
- **sudden weakness or numbness which is not resolving**
- **sudden loss of bowel or bladder control**
- **severe headache which is not improved with painkillers.**

Will I have a follow-up appointment?

Yes, six to eight weeks after your surgery. We will send you an appointment letter but if you have not heard from us within four weeks after leaving hospital, please contact us. At this appointment you may be seen by a physiotherapist or a doctor depending on your pre-operative symptoms, or you may have a telephone follow-up by a clinical nurse specialist.

Contact details

If you have any concerns about your treatment, please contact the following (Mon – Fri, 9am – 5pm):

- **Mr Lucas' and Mr Ember's** secretary on **020 7188 4468**
- **Mr Lam's , Mr Fakouri's and Mr Liantis'** secretary on **020 7188 4467**

Please contact your GP or attend your local A&E department if you have any urgent medical concerns outside these hours.

Notes

[illegible]

Contact us

Pharmacy Medicines Helpline

If you have any questions or concerns about your medicines, please speak to the staff caring for you or call our helpline.

t: 020 7188 8748 9am to 5pm, Monday to Friday

Patient Advice and Liaison Service (PALS)

To make comments or raise concerns about the Trust's services, please contact PALS. Ask a member of staff to direct you to the PALS office or:

t: 020 7188 8801 at St Thomas' **t:** 020 7188 8803 at Guy's **e:** pals@gstt.nhs.uk

Knowledge & Information Centre (KIC)

For more information about health conditions, support groups and local services, or to search the internet and send emails, please visit the KIC on the Ground Floor, North Wing, St Thomas' Hospital.

t: 020 7188 3416

Language Support Services

If you need an interpreter or information about your care in a different language or format, please get in touch using the following contact details.

t: 020 7188 8815 **fax:** 020 7188 5953

NHS Choices

Provides online information and guidance on all aspects of health and healthcare, to help you make choices about your health.

w: www.nhs.uk

Leaflet number: 3832/VER1

Date published: October 2013

Review date: October 2016

© 2013 Guy's and St Thomas' NHS Foundation Trust