

# Facet joint radiofrequency denervation

**The aim of this booklet is to help answer your questions about having a facet joint denervation to treat your back pain. It explains how it is performed, the benefits, risks and alternatives to the procedure and what you can expect when you come to hospital.**

**If you have any further questions, please speak to a doctor or nurse caring for you.**

## What are facet joints?

The spine is a column of bones arranged one on top of the other. The bones are linked at the back by joints called facet joints, one on each side. The facet joints hold the bones together and stabilise the spine, while also allowing movement.

The facet joints may become painful either due to wear and tear (also called degenerative change), stress or injury, although the reason is not always clear. Pain is felt around the facet joints and in the surrounding area. For example, pain starting from the joints of the lower back will often be felt in the buttocks and upper legs.

When the facet joints are tender and sensitive, the muscles nearby can become tight to protect them. When this continues for some time, this also becomes painful.

## What is a facet joint denervation and how does it work?

Facet joint radiofrequency denervation is a procedure in which nerve fibres supplying the painful facet joints are selectively destroyed by heat produced by radio waves and delivered through a needle.

The treatment is usually performed after an injection of local anaesthetic close to the affected joints has helped to reduce feeling and pain.

The denervation treatment involves placing a special needle (radiofrequency probe) near the nerve of the joint; when a radiofrequency current is passed down the probe, a very small area of heat is created that causes a break in the nerve. This procedure does not affect any other part of the body.

In order to make sure that the probe is close enough to the nerve, we will pass a small amount of electricity down it and ask you for feedback, which is why the procedure requires you to be awake. This will also help to avoid the placement of the needle too close to other (major) nerves of the spine.

Once the procedure is completed in one area, then it is repeated in any other areas that require treatment.

The aim of the treatment is to reduce pain coming from the joints in the lower back. This will, in turn, help to reduce spasm in the muscles, improve mobility and reduce stiffness. It should provide longer lasting pain relief compared to a simple anaesthetic injection.

## What are the risks?

Facet joint denervation is a commonly performed procedure and is generally safe and effective. However, no procedure is risk free, and facet joint denervation carries a small risk of the following side effects or complications:

- A skin infection where the needle is inserted, such as redness or swelling – this occurs in one per 1000 cases.
- Bleeding / bruising at the injection site.
- Temporary numbness / weakness from the local anaesthetic that is injected during the procedure – this usually resolves in two to three hours. This can affect your back and limbs and can require you to stay in hospital overnight, although this is rare.
- Allergy to injected drugs – this occurs in one case per 40,000.
- Nerve injury which can cause temporary numbness or weakness – this occurs in one per 1,000 cases and resolves in days-weeks.
- Permanent nerve injury to a nerve supplying the leg or trunk, which is very rare. A figure of one case per 30,000 procedures is suggested.
- Stiffness and soreness for a few days after the treatment – this can last for two weeks. You should take your normal painkillers regularly and do gentle stretches.

It is possible that you may become faint during the procedure, but you will be monitored at all times and treated at once if you do feel unwell.

If headache or limb weakness occurs after leaving hospital please phone the pain service on 020 7188 8877 and select option five or call our main switchboard on 020 7188 7188 and ask for the bleep desk. Ask for bleep 0360 and wait for a response. This will connect you to our pain team.

Out of hours, please contact your GP or visit A&E.

## Are there any alternatives?

The denervation procedure is usually considered after trying less invasive treatments, such as:

- medication
- physiotherapy
- transcutaneous nerve stimulation (TENS).

Exercise, acupuncture, yoga/pilates and relaxation therapy may also help ease back pain. Spine surgery could be also considered in selected cases.

Denervation is usually only considered if you have responded well to local anaesthetic injections near the affected areas, and these have helped to reduce pain. Please discuss with your doctor if you would like to explore alternative treatment options.

## 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.

If you would like more information about our consent process, please speak to a member of staff caring for you.

## What happens on the day of the procedure?

You will attend the theatre unit as described on your admission letter. It is important that you follow the instructions on your letter carefully and arrive at the correct time.

Please remember to bring with you:

- dressing gown and slippers
- any medication you are taking
- something to read and your mobile phone.

When you arrive you should give your name to the receptionist and you will be asked to take a seat in the reception area. For more information about the operating theatres at Guy's and St Thomas', please see our leaflet: **Surgical Admissions Lounges (SAL) and Day Surgery Units (DSU)**.

Before the procedure a nurse will take your blood pressure and pulse and you will be given a gown to change into. You can put your own dressing gown on over this gown while you wait. You will then be taken to the preoperative area to wait for your procedure.

Please note the time stated on your letter is not the time of your procedure, but to make sure that you are prepared and ready for your procedure. Therefore, you may have to wait for a while in the preoperative area. Your anaesthetist and pain specialist will see you before your procedure.

Due to very limited waiting space in the departments only one friend or relative will be able to stay with you while you wait.

If you have any current infections such as a chest infection or a urinary infection (UTI), please contact us before you come for your procedure.

All women of child-bearing age will be asked to provide a urine sample for us to test to rule out pregnancy.

You must tell your doctor if you could be pregnant. X-rays are safe for adults, but may harm your developing baby, so they aren't usually done during pregnancy. If you are pregnant, your doctor will discuss alternatives to the procedure.

Please do take all your usual medication apart from blood thinning drugs (for example warfarin, rivaroxaban, clopidogrel), or specific diabetes medications (for example insulin or metformin).

Please contact the admissions office on 020 7188 8877 as soon as you get your appointment to remind us if you take any of the above mentioned drugs so we can give you instructions.

## Will I feel any pain?

Your doctor will be performing the procedure on a very sensitive area so you may experience some pain. You will be given local anaesthetic to the skin to minimise this.

Occasionally, you may be given sedation. If you have any concerns, you can discuss them with your doctor on or before the day of the procedure.

## What happens after the procedure?

- You will need to stay in the Day Surgery Unit for at least one hour after your procedure so your recovery can be monitored and we are sure that it is safe for you to go home.
- Any medication that you need to take will be explained and you will receive written information about the medication before you go home.
- You will be given written instructions about the care you will need when you go home. Please feel free to ask any questions before you leave.
- You will be able to leave when your nurse is satisfied, you are well enough and there is a responsible adult to accompany you.

Please arrange for a responsible adult to drive you home or accompany you in a taxi. We do not recommend public transport because it is not safe if you feel unwell. If you are travelling home alone (this is only allowed if you have not had any sedation), please use a taxi.

If your surgery is in the morning, the person collecting you should phone the Day Surgery Unit between 11am and 11.30am to find out when you will be ready. If your surgery is in the afternoon the person should phone between 3pm and 3.30pm. Contact details for the Day Surgery Unit are below.

## What do I need to do after I go home?

Following the procedure and for the rest of the day it is important to follow the advice below for your safety.

Even if you feel fine, your reasoning, reflexes, judgement and co-ordination skills can be affected for 24 hours after your procedure.

Please rest at home for the rest of the day after your procedure. Follow the advice and instructions that the doctors and nurses have given you.

For 24 hours after the procedure (or 48 hours if you have had sedation) do not:

- drive any vehicle
- ride a bicycle
- operate any machinery
- attempt to cook, use sharp utensils or pour hot liquids
- drink alcohol
- smoke
- take sleeping tablets
- make any important decisions or sign any contracts.

It is important to mention that some people feel pain relief immediately after the procedure, but some people feel no immediate change and the pain relief develops over a few days. Some people feel worse for a short period before the pain relief develops. If you experience some initial soreness you should take your usual painkillers and rest until it settles.

## Will I have a follow up appointment?

Yes, six to eight weeks after your procedure. 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 will be seen by a doctor or a specialist nurse.

## Appointments at King's

We have teamed up with King's College Hospital in a partnership known as King's Health Partners Academic Health Sciences Centre. We are working together to give our patients the best possible care, so you might find we invite you for appointments at King's. To make sure everyone you meet always has the most up-to-date information about your health, we may share information about you between the hospitals.

### Contact us

If you have a problem at home and you are worried about your condition please telephone the Day Surgery Unit on 020 7188 1738 at Guy's Hospital or 020 7188 3222 at St Thomas' Hospital.

Alternatively you can contact the Pain Management Unit at 020 7188 4714 from 9am to 5pm to talk to one of the nurses.

Before you go home you will be given information about who to contact if the Pain Unit is closed.

For more information leaflets on conditions, procedures, treatments and services offered at our hospitals, please visit [www.guysandstthomas.nhs.uk/leaflets](http://www.guysandstthomas.nhs.uk/leaflets)

### 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:

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

### 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 111**

Offers medical help and advice from fully trained advisers supported by experienced nurses and paramedics. Available over the phone 24 hours a day.

**t:** 111

**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](http://www.nhs.uk)

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To join, please call 0848 143 4017, email [members@gstt.nhs.uk](mailto:members@gstt.nhs.uk) or visit [www.guysandstthomas.nhs.uk](http://www.guysandstthomas.nhs.uk)

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