

Patient information

Denervation procedures

What is a denervation?

A denervation is a procedure that aims to permanently stop a nerve transmitting pain. The nerve is destroyed by heating it with an electrical current from a special device, called a radio-frequency machine.

This treatment is usually done after procedures, such as facet joint or sacro iliac injections, have been effective.

It is very important that you inform the Pain Clinic if you are taking drugs to thin your blood, for example: Warfarin, Clopidogrel, Rivaroxiban, Apixaban and Dabigatran. The doctor will then provide guidance as to whether there is a need to temporarily stop any blood thinning drug.

The day of treatment

On arrival please hand in your completed health questionnaire. **Please bring in your current medication for pain relief.** You will then be asked to put on a theatre gown and your blood pressure and pulse will be recorded. The doctor will discuss the procedure and you will be asked to sign a consent form.

The procedure will be carried out under X-ray screening. A self-adhesive foil plate will be placed onto your thigh. This is connected to the radio-frequency machine to make an electrical circuit.

When you are in the correct position on the X-ray table, the doctor will clean your back with an antiseptic fluid, which can feel cold on your skin. Local anaesthetic is then injected into your back. This may sting initially but the area will soon go numb.

A special hollow needle is then inserted. Then a very thin wire will be threaded down inside the needle and attached to the radio-frequency machine. The doctor

will then test the machine on different settings. You will be asked to say when you can feel a tingling or twitching sensation. This is very important as it makes sure the tip of the needle is in exactly the right place. The machine settings will then be changed to destroy the nerve by heating it for a minute. You may feel slight warmth and pain at the site of the procedure.

This process may be repeated at different points on your back.

Following the injection

After the procedure you will be taken to a recovery area. You will then be offered light refreshment. Your blood pressure and pulse will be checked again before you get dressed. Before your departure a doctor may review you and a nurse will advise you on your aftercare and any medication your doctor has prescribed for you to take home.

Please ensure that you have arranged for someone to collect you after the procedure.

Benefits

In the longer term, this procedure provides excellent, long-term relief in about half of patients who have experienced good pain relief from diagnostic injections. Initial response rates are 70%. Pain relief may last at least three to four years in younger people and in older patients it may last longer. However, early re-growth of nerves is possible and sometimes re-denervation may be necessary after six months. Denervation may be repeated if the benefits wear off, usually after a good response to further injections.

Risks

For up to 3 months after the procedure, you may expect to experience increased pain. During this time extra painkillers may be required and physiotherapy will be recommended.

The chances of experiencing an increase in pain in the longer-term are less than 1%. Patients may, however, experience long-term numbness of the skin and occasionally soreness of the muscles of the back. Very rarely, there may be some muscle weakness. Local anaesthetic and steroids are used to help cover post-operative soreness and these may cause headaches for a few days, and occasionally temporary flushing of the skin.

Unfortunately, no procedure is risk free. Although long-term side effects and complications including increase in pain are uncommon, the possibility cannot be

excluded. Common short-term side effects of any procedure may include, pain at the site of injection, increase in pain generally, and far less commonly infection, bruising, bleeding and injury to tissues with the injection procedure.

Please ask your doctor if you are concerned about side effects.

What to expect afterwards

As previously mentioned you may find that your pain gets worse before it gets better. You may notice a feeling of numbness, heaviness or pins and needles. This is normal and will wear off. It may help to use a hot water bottle or an ice pack on the affected area.

Take your regular painkillers as normal, although you may find additional pain-relieving drugs may be required. It is important not to stop any drugs prescribed for pain relief suddenly. You should gradually reduce your medication as you feel better. Try to keep on the move about the house but do not do anything too strenuous. As your pain decreases, you should try to gently increase your exercise. Simple activities like a daily walk, using an exercise bike or swimming will help to increase your muscle tone and strengthen your back. The best way is to increase your activity slowly. Try not to overdo things on good days, or you might end up paying for it with pain the following day.

A letter will be sent to your GP, and we will make contact with a questionnaire to assess your response to the injections and to make plans for follow up.

Points to remember

- 1 **For morning procedures:** nothing to eat after midnight prior to treatment (no sweets or chewing gum), water only until 7.00am.
- 2 **For afternoon procedures:** nothing to eat after 7.00am (no sweets or chewing gum), water only until 11.00am.
- 3 **Pre-procedure advice regarding diabetes:**
 - If you are **Type 1 Insulin controlled diabetic or Type 2 tablet and Insulin controlled diabetic** contact your diabetic provider (GP or diabetic nurse) for advice on how to manage your diabetic medication prior to your intervention/injection.
 - If you are **Type 2 tablet controlled diabetic** please contact the Pain Service 01284 712528 for advice on how to manage your diabetic medication prior to your intervention/injection.

- 4 Please bring your glasses if you need them for reading.
- 5 Always bring a list of all current medication (tablets) and your current pain control medications on the day.
- 6 Continue taking all your regular medication on treatment day.
- 7 If there is any possibility that you may be pregnant, please inform a member of the nursing team.
- 8 Your stay may be 1 - 4 hours.

Additional Information

The information in this leaflet is not intended to replace your doctor's advice. If you require more information or have any questions, please speak to your doctor or contact one of the following:

Pain Clinic	Tel: 01284 713330
Waiting list enquiries	Tel: 01284 712980

If you would like any information regarding access to the West Suffolk Hospital and its facilities please visit the website for AccessAble (formerly DisabledGo)
<https://www.accessable.co.uk>

