

Radiofrequency denervation for the treatment of pain

The Pain Management Unit

What is radiofrequency denervation?

Radiofrequency denervation is a procedure in which the nerve fibres supplying painful areas are selectively destroyed by heat. This heat is produced by radio waves and delivered to the nerve fibres through an electrode. The treatment is usually performed after patients have undergone successful injections of the painful area. It should provide longer lasting pain relief.

How is the procedure performed?

We will ask you to remove your clothing and wear a hospital gown. We will help you to move into the best position on the X-ray table to expose a small part of the affected area.

Your skin will then be sprayed with antiseptic, which may feel very cold. The skin over the area to be injected is frozen with local anaesthetic. This may sting a little. A fine insulated needle is passed under X-ray guidance to a point near to where the nerve lies. Once in position, a small current is passed down the needle. This stimulates the nerve and causes some mild tingling in the back or mild muscle tightness. This indicates that the needle is lying right next to the nerve.

After some local anaesthetic is injected, the needle tip is heated by radio waves (a bit like microwaves) to just below boiling point for 60 to 160 seconds. This is not painful and is repeated on all the affected areas.

What are the benefits of radiofrequency denervation?

Experience shows that about 80% of patients with pain experience significant pain relief from this procedure, provided they have had some limited pain relief from simple injections. The relief can last up to a couple of years or more and may be repeated if symptoms return.

Are there any risks?

Radiofrequency denervation has been subject to several clinical trials and evaluations over the years and has been shown to be safe and effective. With X-ray guidance, the chances of harm are small. The nerves affected are the ones that transmit pain signals. This procedure does not affect any other nerves.

Following radiofrequency denervation, there may be some soreness in the area where the needles were placed. Patients may also have some numbness of the skin round the injection site. There is however, a very small risk of infection, nerve damage and neuralgic pain associated with this procedure (0.01%). Neuralgic pain tends to settle within 2-3 weeks.

What are the alternatives to radiofrequency?

Alternatives such as physiotherapy will have been discussed with you at your consultation.

How long will I be in hospital?

We will ask you to attend the hospital on the day of your procedure. If your procedure is in the morning, then you will need to arrive at 8.30am. If your procedure is in the afternoon, you need to arrive at 1.30 p.m. A letter providing all the information will be sent to you before the date of your procedure. You will probably be in hospital for about 3 hours.

What happens before the procedure?

You may eat a light meal and drink normally prior to this treatment. Please arrive in good time for your appointment. Before the procedure, the doctor will explain the treatment. You will be able to ask any questions you may have about your treatment, and when you are completely satisfied that you would like to go ahead with the treatment that has been explained to you, you will be asked to sign a consent form.

It is important that you tell the doctor if:

- You are taking Aspirin, Warfarin, Clopidogrel or similar drugs
- You have a bleeding problem
- You are allergic to local anaesthetic
- You have any other serious medical problems
- You are unwell on the day.

What happens after the procedure?

After the procedure you will rest for a while. During this time you will be able to eat and drink normally. The nurse will assess whether you are ready to go home and discuss any follow up arrangements with you.

How will I feel?

You may experience some discomfort and a 'bruised' feeling for anything up to two weeks. We normally suggest that you take things gently during this time. After a one to two week period, it is essential that you undertake regular stretches and exercises. The combination of radiofrequency denervation and structured exercise gives the best results.

When will I be able to drive?

You must not drive after the procedure, so please arrange to have someone with you or to collect you. You should be able to drive as soon as you feel you have recovered fully from the procedure, usually the following day.

If you have any queries or concerns, please contact:

The Pain Management Unit

Hove Polyclinic, Nevill Road, Hove, East Sussex BN3 7HY
01273 242013

Clinical Nurse Specialist Chronic Pain 01273 242024 Ext.2627

If you do not understand this leaflet, we can arrange for an interpreter.

إذا كنت لا تستطيع فهم محتويات هذه النشرة فبإمكاننا عمل الترتيبات لتوفير مترجم شفوي لك.

এই প্রচারপুস্তিকাটি যদি আপনি বুঝতে না পারেন, তবে আপনার জন্য আমরা একজন অনুবাদকের ব্যবস্থা করে দিতে পারি

如你不明白本單張的內容，我們可安排口譯員服務。

如你不明白本传单的内容，我们可安排口译员服务。

اگر مندرجات این جزوه را نمی فهمید، ما می توانیم مترجم در اختیارتان بگذاریم.

Jeśli masz trudności w zrozumieniu tej ulotki, możemy zorganizować tłumacza.

© Brighton and Sussex University Hospitals NHS Trust

Disclaimer

The information in this leaflet is for guidance purposes only and is in no way intended to replace professional clinical advice by a qualified practitioner.

Ref number: 220.1 Publication Date: April 2013 Review Date: April 2015

