

Radio Frequency Facet Denervation

Information and advice for patients

Pain Management

During your visit to the Pain Management Clinic, it was suggested that denervation might help to ease your pain. This leaflet helps to explain briefly how it may affect you, because it is important that you are aware of the potential benefits and any possible side effects or complications.

What is denervation?

A denervation is similar to a facet joint injection but uses an electrical device to destroy the actual nerves that carry the pain signals. We also inject local anaesthetic and steroid around the joint, to give extra benefit.

How does it work?

The denervation works by using a very small electrical current to heat the nerve, causing any pain signals to be blocked at that point. This should help to ease your pain.

What are the benefits to the treatment?

How long the pain relief lasts varies from person to person, lasting from six to twelve months. Dreyfus et al found that 60% of patients had improved pain relief at 12 months follow-up, and Schaerer found fair to excellent pain relief in 68% of patients at average follow-up of 13.7 months.

There is, however, a small chance of little relief being obtained.

This procedure is not a cure for back pain on its own but, as with the facet joint injection, if followed by physiotherapy it may help to improve your movement and functional ability.

Are there any alternatives treatments?

Alternative treatments may include other medications, TENS or attending a Pain Management Programme.

Are there any risks or side effects?

All medical procedures carry a risk of complication. Precautions are always taken to minimise the risks as far as possible. All of the risks mentioned below are uncommon, but we feel that you should be aware of them:

- Occasionally bruising may occur around the scar.
- The pain may worsen for a few days, but this should settle.
- Sometimes people can faint during, or after, the injection. This is one of the reasons we monitor your blood pressure and ask you to rest.

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- Injection: We perform the procedure under aseptic conditions and request that you also keep the area clean afterwards. If you feel that there is an increase in pain with associated redness, heat or swelling then the area may have become infected, and you will need to contact your GP. Infection rates are between 1% and 2%, with severe infection rates at 0.15 to 0.01%. There is increased risk of infection in patients with diabetes. (Chens, 2007).
- The local anaesthetic used may cause left weakness for a few hours. Very rarely the anaesthetic may cause prolonged leg weakness and numbness which could require an overnight stay in hospital.
- You might be allergic to the steroid or local anaesthetic components of the injection, although this is very uncommon and would happen during the procedure itself. This occurs in less than 1 in 7000 procedures, and can just be a rash, or, even more rarely, a life-threatening event. (Cheng, 2007).
- Diabetes may need to be monitored more closely after the procedure, as steroids can cause elevated blood sugars.

What to expect

Before the procedure, please let us know if you are taking anticoagulant medications (blood thinners), such as Clopidogrel (Plavix), apixaban, rivaroxaban or warfarin. You may need to stop these a few days/ weeks before the procedure. You can continue to take Aspirin as normal. Take all your other medications as prescribed.

You will be admitted to hospital, on the day care ward. You may eat and drink as normal. A nurse will check your blood pressure and you may be given a gown to put on. The doctor will explain the procedure and ask you to sign a consent form. Please make sure you have understood the explanation and ask any relevant questions.

During the procedure

You will be taken to the procedure room. Once inside the room you will be asked to lie on the X-ray table. X-rays will be taken throughout the procedure to ensure the correct positioning of the needle. The doctor will inject the area to numb the skin. A special needle is inserted, and you will be asked to tell us if you feel any unusual sensation in your legs. Some patients find the procedure a little painful, but this discomfort should settle quickly once finished. The whole procedure should take approximately 40-50 minutes.

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After the Procedure

You will be asked to rest for half an hour. When you are ready, and the staff are happy with your condition, you will be able to go home, accompanied by a friend or relative. You must not drive a vehicle yourself or travel on public transport to get home.

Take it gently for a few days. The denervation may take a few days to start acting and relieving the pain, initially the pain may feel even worse, but this should settle. It is important that you continue taking your usual pain killers until the denervation starts to work.

Follow up

After the procedure, we will discharge you back to the care of your GP. They will review your progress and request re-referral back to the Pain Clinic as necessary.

Contact Details

If you have any questions or concerns, please contact Pain Management Services on:

Tel: 0121 507 4344/ 5602/ 4866

Monday to Friday 9am-4pm

If you have any problems outside of these times, or experiencing severe side effects, please contact your GP.

More information with regards to your condition, treatment options and support groups, can be found at:

www.painrelieffoundation.org.uk

www.thebritishpainsociety.org

www.painconcern.org.uk

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References:

Dreyfus P, Halbrook B, Pauza K, Joshi A and Bogduk N. Efficacy and validity of radiofrequency neurotomy for chronic zygapophysial joint pain. *Spine* 2000; 25:1270-1277.

Schaerer JP. Radiofrequency facet rhizotomy in the treatment of chronic neck and low back pain. *Int Surg* 1978; 63:65-59.

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