



Facet Joint Rhizolysis/Radio Frequency Lesioning (Denervation) For The Treatment Of Pain

What is Rhizolysis/Radio Frequency Lesioning?

Rhizolysis/Radio Frequency Lesioning (Denervation) is a procedure where nerves to facet joints (medial branch nerves) are destroyed (sometimes called lesioning or denervation). The procedure is usually undertaken when medial branch blocks have proven to produce significant pain relief for a short duration. The purpose is to try and produce more prolonged pain relief sometimes even lasting a number of years. The probe is heated to disrupt the nerves, however some doctors may use other techniques to do this. In addition, local anaesthetic and/or steroid is injected to reduce any post procedural discomfort. Usually, several injections are undertaken during the same procedure. It is used for localised spinal pain in the lumbar or cervical area where simpler measures have not helped.

Is this the right treatment for me?

Other treatment options will be discussed with you before deciding to go ahead with the injections and your consent is needed. The decision on whether or not to go ahead with the injection(s) is a shared decision between you and your doctor. Your doctor will be able to provide you with up-to-date information about the likelihood of this being a successful treatment for you and how this treatment fits into the best pathway of care. If you are undecided about whether or not to have injections then further advice and information to make this informed decision can be provided. Please speak to your doctor for more information.

If your health has changed, it is important to let your doctor know;

- If you have an infection in your body or on the skin of your back, your doctor will postpone the treatment until the infection is cleared
- If you have been started on anticoagulant or antiplatelet medicines that “thin the blood” such as warfarin, heparin or clopidogrel, this may require extra preparation
- If you suffer from diabetes, the use of steroids during injections may cause your blood sugar to change requiring monitoring and adjustment of your diabetic medication
- If you have any allergies

You must also inform the doctor if there is any chance that you could be pregnant. Finally, if you are planning to travel abroad or fly within two weeks after the injections, please let your doctor know as it may be best to change the date of the injections.

I have heard that steroids are being used unlicensed/off-label, what does this mean?

Steroids (corticosteroids) are commonly used in managing chronic pain but are licensed for specific routes of administration only. Some routes of administration to treat pain are not on license. This is referred to as off-label use. The manufacturer of the medicine may not have applied for a specific licence to extend its usage. MANY medicines used in pain medicine are used off-label. Your doctor will be able to discuss this with you further.

What will happen to me during the treatment?

Before the injection, your doctor will discuss the procedure with you. Your doctor will either obtain your consent before the injection or confirm this consent if it was previously given. The treatment will take place in a dedicated area with trained personnel. An X-ray machine (or other forms of image guidance) will be used to enable accurate injection. Not all doctors undertake these injections in exactly the same way but the following usually happens; You will be prepared for the procedure as per local protocol:

- Observations such as blood pressure and pulse rate may be made
- A small needle (cannula) may be placed in the back of your hand

- You will be carefully positioned and the skin around the injection site(s) will be cleaned with an antiseptic solution or spray; this can feel very cold
- X-ray (or an alternative way of guiding the needles) will be used
- You will feel a stinging sensation as local anaesthetic is injected to numb the skin and surrounding tissues. Your doctor will warn you of this first
- The doctor will direct the special needles to the area(s) suspected to be a source of pain
- Electricity is applied to the needle tip to test if the needle is correctly placed next to the sensory nerve to be destroyed. You will be asked to say when you feel a tingling sensation as the doctor tests the radio frequency machine on different settings though some doctors use a technique without the need for this step. When undertaken in the lumbar region, it is common to get twitching of the muscles in the back when this is done. For lumbar treatment, you will be asked whether you are experiencing any tingling or discomfort or twitching in your leg to make sure that the needle is not too close to these nerves. The doctor will also observe for any movements of muscles in your foot or leg, which may indicate that the needle needs repositioning
- Injections of local anaesthetic are made. You may feel pressure, tightness or a pushing sensation. The doctor will then treat the nerves. If there is any discomfort, do let the doctor know. It is important to keep very still during this part of the treatment

What will happen to me after the treatment?

After treatment you will be taken to a recovery or ward area where nursing staff will observe you. Sometimes you will be asked to lay flat for about 30 minutes or longer. You may be assisted to sit up and your blood pressure and pulse may be checked. You will be advised when to get dressed and be given assistance to help to ensure that you can stand safely after the procedure.

When will I be able to go home from hospital after my treatment?

You will usually be able to return home within a few hours after the injection and in some cases much sooner, depending on how many injections are needed and how long your doctor or nurse want you to stay for recovery. Please ensure that you have made arrangements for someone to collect you after the procedure. Failure to do so will likely result in your procedure being cancelled. It is unsafe for you to drive home immediately after the procedure. If you do so your motor insurance will be invalid.

What can I do after my procedure?

Ideally, you should arrange for someone to stay with you for 24 hours but, failing that, you should at least have access to a telephone. You should not drive, operate machinery, sign legal documents, provide childcare unsupervised or drink alcohol until fit to do so. If in doubt, please discuss these issues with your doctor for further advice.

When can I return to work after the procedure?

This will vary between individuals and may depend on the nature of your work. It is difficult to give general advice and so you should discuss this with your doctor.

Will I experience any side-effects?

As with any procedure, side-effects may occur. However, these are usually minor and there is little risk of serious harm. Side-effects may include;

- Mild local tenderness and / or bruising at the site of the injection, that usually settles over the first few days
- A prickling sunburn-like sensation over the skin of the back, that usually settles with time but may last a few months
- Numbness and/or weakness in your legs for lumbar injections, due to the local anaesthetic spread, which may happen very rarely. Should this occur, the effect is temporary and will rapidly resolve over minutes or rarely hours
- Infection. This is rare. You should seek medical help if there is local warmth or redness over the site of injection with tenderness and/or you feel hot and unwell. This may require antibiotic treatment
- There are important nerves in the spine, but serious nerve injury is extremely rare (less than 1 in 10,000 cases). Injury to nerves that supply muscles to your leg can lead to foot drop for lumbar injections causing you to be unable to lift your foot up. Great care is taken during the procedure to avoid this very rare complication by placing the needles carefully under x-ray and only treating the nerves when the doctor is confident that they are in the right position
- Injection treatments are not always effective and may not help your pain

- Injury or collapse of the lung may occur (pneumothorax) from injections in the thoracic area only. This is very rare. If you get chest pain or breathlessness, you should seek immediate medical help
- In rare circumstances, steroid use can damage your eyesight. You should report any new visual disturbance (such as blurred or distorted vision) to your doctor

What can I expect in the days afterwards?

You may find your pain gets worse for a few weeks before it gets better. You may notice a feeling of numbness, heaviness or pins and needles. This is normal and will wear off. Take your regular painkillers and try and move about the house, but do not do anything too strenuous. Please keep the area of the injections dry for 24 hours following the procedure. Take your regular pain killers and medications as normal and this should settle down. Try to keep on the move about the house whilst avoiding anything too strenuous.

What should I do in the weeks after the injections?

As your pain decreases, you should try to gently increase your exercise. Simple activities like a daily walk, using an exercise bike or swimming on your back will help to improve your muscle tone. It is best to increase your activities slowly. Try not to overdo things on a good day so that you end up paying for it with more pain the following day. Your doctor will give specific advice which may differ depending on which nerves are treated e.g. nerves in your back or neck.

What follow-up will be arranged?

Though practice may vary, a letter will usually be sent to your GP and your doctor will advise on what to do after the procedure. You may be asked to make a call to the pain department, be given a form to fill in, or given a telephone review or other appointment.

Is there anything else I need to consider before the procedure?

- Please bring your glasses if you need them for reading
- Always bring a list of all current medication
- Continue to take your medication as usual on the treatment day

