

# Cervical Rhizolysis or Radiofrequency Lesioning

Information for patients



**New Hall  
Hospital**

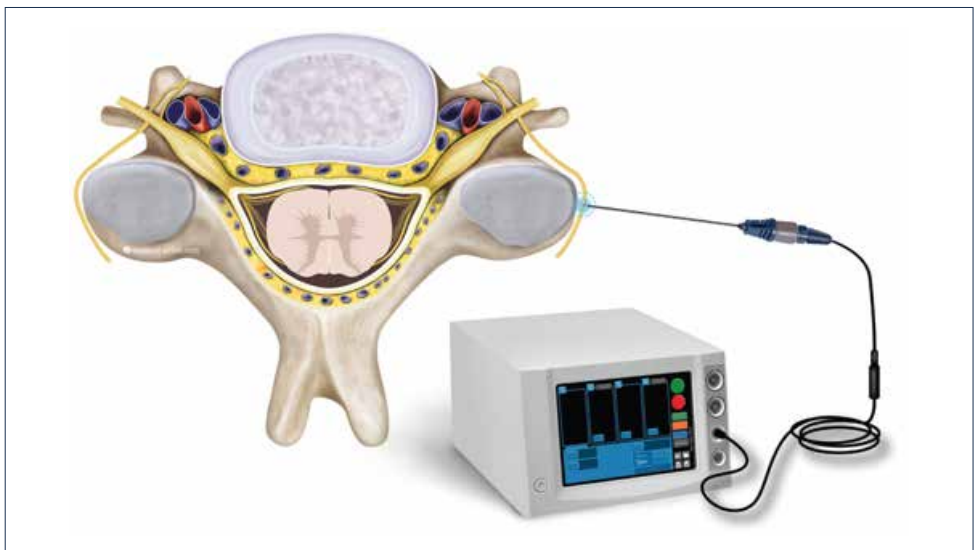
Part of Ramsay Health Care

# What is **Rhizolysis / Radio frequency Lesioning?**

If you have had a change in your neck pain symptoms following a diagnostic injection called a Medial Branch Block (MBB), this confirms that the structures supplied by the nerve called the Medial Branch of the Cervical Dorsal Ramus are, at least in part, responsible for your symptoms.

During cervical Rhizolysis (or Radiofrequency Lesioning) a special needle is attached to a radiofrequency machine. The tip of the needle is applied to your nerve. The Consultant checks that the needle is in the correct place by placing a small current through the tip of the needle. You may then feel a tingling sensation.

Sometimes your muscles supplied by the nerve, twitch, if the needle is in the right spot. The Consultant then heats the tip of the needle using the radiofrequency waves, which deliberately damages the nerve so that it can no longer send pain messages from the joint. Usually several levels in your neck are treated in one sitting. The procedure can be done on one side, or both sides, depending on your symptoms. This technique can also be called Frequency Nerve Ablation or Denervation.



# Why do I need this procedure?

- The nerve that supplies the facet joints and some of the muscles in your neck (cervical spine) is called the Medial Branch of the Dorsal Ramus. By deliberately damaging this nerve using heat from radio frequency waves, the aim is to stop the nerve carrying the pain signal from the joints in your neck.
- Sometimes the joints in the neck can refer pain into the back of your head. Rhizolysis / RFL may reduce or resolve these symptoms, especially if they felt better, even temporarily, after your previous Medial Branch Block Injection.
- By giving you a window of pain relief from your pain, this allows you to gradually return to increased levels of activity and exercise. In the long term exercise has been shown to be the best way to manage chronic neck pain.

## Consent

Your spinal specialist will explain the risks and benefits to the procedure. These are also outlined in this leaflet. You will be asked to sign a Consent Form prior to the injection. If you have any questions, then please feel free to ask any member of the Spinal Team. There is also a patient information leaflet on consent, that you can read for more information - please ask if you would like a copy.

## What are **the risks?**

### Common

- Pain and bruising at the injection site. This will improve after a few days and not everyone experiences it.
- Discomfort and a local buzzing sensation during the procedure.
- A temporary worsening of neck pain while the structures recover.
- Feeling faint as you may have a temporary reduction in blood pressure.

## Rare

- Allergic reaction to the local anaesthetic, antiseptic or plasters used. If you have any known allergies, then please advise your spinal medical team prior to the procedure.
- Infection at the needle site.

## Very Rare

- Damage to the nerve root, which sits in front of the joint via trauma from the needle or a bleed around the nerve. Any of these complications can apply pressure to the nerve which may lead to an increase in arm symptoms. It is very rare for permanent damage to occur to a nerve outside the spinal column and the injection is done under X-Ray guidance so the Consultant can accurately place the needle.

## What are **the benefits?**

- By reducing your pain, you may then be able to engage with other beneficial activities such as exercise or Physiotherapy.
- Your day to day functions, sleep and ability to return to your normal activities, may improve as your pain reduces.
- You may be able to reduce your current pain medication, under advice from your GP if your symptoms improve.

## How do **I prepare?**

### **Please advise us if any of the following apply:**

- You have tested positive for MRSA.
- You are feeling unwell or have a temperature.
- You have been admitted to hospital since being placed on the waiting list for the procedure.
- There is any possibility you might be pregnant. The procedure is done using an X-Ray.
- If you have a blood clotting disorder.

If you are taking any medication that thins your blood such as:

- Aspirin or Warfarin

- Injections such as Warfarin, Heparin, Dalteparin or Enoxaparin
- Anti-Platelet drugs such as Clopidogrel, Rivaroxaban, Apixaban, Dabigatran, Edoxaban, Ticagrelor, Diprydamole

If you are not sure about your medication you can check it using the British National Formulary website: [bnf.nice.org.uk](http://bnf.nice.org.uk)

Please ensure that a responsible adult accompanies you to the hospital and is able to drive you home afterward. This is because you will be unsafe to drive after the procedure due to the potential numbing effect of the local anaesthetic on your arm. We do not recommend that you use public transport. By the following day the numbness should have worn off.

## What happens **during the procedure?**

You will be sent an appointment to come to the hospital to have your injection. Expect to be in the hospital for 3-4 hours, although often you may be able to go home more quickly than this. You will be asked to change into a hospital gown. Your neck will be cleaned with antiseptic solution. The injections are done under X-Ray guidance. Local anaesthetic will be injected to numb the skin which can sting.

A fine needle is then introduced into your neck down to the nerve to be blocked and more anaesthetic will be introduced around it.

The needle is attached to the radio frequency machine via an electric cable. The Consultant will check that the needle is in the right place by sending a small electrical signal down the needle. You may feel some local buzzing or tingling. The muscle in your neck that is supplied by the nerve may also twitch. This is often a good indicator that the needle is in the right place. The tip of the needle is then heated using the radio frequency waves. This deliberately damages the nerve to stop it carrying a pain signal. The same procedure is done to several levels in your neck, usually in the same place as you had your medial branch block procedure. This can be done on one side, or both sides, depending on your symptoms. The whole procedure takes on average 20-40 minutes, depending on how many levels you have treated.

## What happens **after the procedure?**

You will be transferred to a recovery area. When you feel sufficiently well enough and staff are satisfied with your vital signs, you will be discharged. The person accompanying you can then drive you home. Make a note of any changes in your neck, head and arm pain for the first 6 hours after the Rhizolysis. Please use the pain diary at the end of this leaflet to record the change in pain levels as they occur.

It's common for the pain in your neck to be temporarily worse after Rhizolysis/RFL. This can last for several days, but sometimes several weeks as the structures recover. We therefore recommend that you continue with your usual pain relief medications. The following day you can gradually and gently return to normal day to day activities. We would advise you to avoid strenuous activity for 48 hours after the procedure.

## Will I have a **follow up appointment?**

A follow up appointment is not usually required after this procedure. If successful, you can get pain relief from anywhere between weeks and years. The nerve that has been damaged, will try to regenerate and can grow back and re-establish a connection again with the cervical facet joint. It is really important, therefore, to use any window of pain relief that this procedure gives you to pace a gentle return to regular exercise. It is the ongoing exercise that lubricates your joints and strengthens your muscles. People who are active and regularly exercise get less episodes of neck pain. They are generally able to cope better with these episodes and they tend to settle more quickly.

Rhizolysis/RFL does not work for everyone. If you do not respond, then there may be other pain mechanisms at work driving your symptoms. This short and clear video helps to explain why you may have ongoing pain symptoms, despite treatment.

Tame The Beast: <https://www.youtube.com/watch?v=ikUzvSph7Z4>

A referral to Pain Clinic may be useful if this procedure does not help. It is rare to have surgery for neck pain alone, as it's less likely to help neck symptoms and is mainly offered to help arm pain coming from a compressed nerve. You will be left on a Patient Initiated Follow Up (PIFU) appointment for 1 year after rhizolysis, which means you can contact your spinal specialist if required.

## Who do I contact **if I have concerns?**

**If you are worried about any symptoms after your injection you can contact the nursing team for advice.**

Remember it is common to experience a temporary increase in symptoms in the neck and arm after the injection and you should manage this by taking pain relief as prescribed by your GP and adjusting your activities.

### **Contact us if:**

- Your injection site shows signs of infection such as discharge or redness/swelling or if you have a fever or feel unwell.
- You experience unremitting severe pain, or new pain, weakness or altered sensation in a different place or limb from your symptoms prior to the injection.

If you are unable to reach the team or you have an urgent query outside of the hours the nurses are available, contact your GP or local Out of Hours Service.

### **Useful Contact Numbers:**

#### **For Medical Enquiries Call:**

**New Hall Hospital Switchboard: 01722 422 333 and speak to the operator** then ask to be directed to: The Outpatient Department.

#### **To book a Follow Up Appointment Call:**

**New Hall Hospital Switchboard: 01722 422 333 and speak to the operator:**

NHS Patients: Ask to be directed to Spinal Secretaries

Private Patients: Ask to be directed to your Consultants Private Secretary

# Pain Diary:

Pain score: 0 is no pain, 10 is very severe pain.



|                               | Neck Pain | Head Pain | Arm Pain |
|-------------------------------|-----------|-----------|----------|
| Prior to injection            |           |           |          |
| First 6 hours after injection |           |           |          |
| 24 hours after injection      |           |           |          |
| Two weeks after injection     |           |           |          |
| One month after injection     |           |           |          |
| Two months after injection    |           |           |          |

## References and useful links:

- <https://ramsayhealth.co.uk/hospitals/new-hall-hospital/treatments/spinal-services>, click on the services button for more information
- <https://tamethebeast.org>
- British National Formulary. <https://bnf.nice.org.uk/treatment-summary/oral-anticoagulants.html>