

Radiofrequency Ablation

Radiofrequency ablation uses electricity to produce heat and numb nerve(s) that carry signals from a painful part of the body. The following are examples of radio-frequency ablation treatment:

- Ablation of nerves supplying facet and/or sacroiliac joint, for treatment of back pain.
- Ablation of nerves supplying a part of the body, for treatment of painful post-operative scar.
- Ablation of the nerve supplying a painful joint.

What are facet and sacroiliac joints?

Facet joints (FJs) are pairs of small joints located at the back of the spine where one vertebra overlaps the next vertebra. These joints provide stability to the spine and allow it to twist and bend. Sacroiliac joints (SIJs) join the spine to the hips.

Why do I need this treatment?

Radiofrequency ablation to facet joints can treat neck (cervical), mid-back (thoracic) or low-back (lumbar) pain caused by degeneration/wear and tear of one or more of these facet joints. Cervical FJ degeneration can cause pain in the neck, shoulders arm and headache. Lumbar FJ degeneration can cause pain in the back, buttocks, groin and legs. SIJ degeneration can cause back and leg pain.

Please inform us if you:

- Are on medicines that thin the blood or prevent clotting, eg, Aspirin, Apixaban, Clopidogrel, Dipyridamole, Prasugrel, Rivaroxaban and Warfarin. We also need to know the name of the consultant who started you on the medication.

- Suffer from a blood disorder that interferes with clotting eg haemophilia.
- Are allergic to any medicine, food, sticky tapes, metal or latex.
- Are scheduled for any kind of surgery.
- Are undergoing steroid injections by any other doctor and, if so, when was the last injection and what was the dose of steroid used.
- Are due a flu vaccine.
- Are pregnant, if there is a possibility of pregnancy or if you are planning to conceive.

Essential information that you need to tell us on the day of the procedure:

- If there is a possibility of pregnancy.
- Are you on antibiotics for the treatment of an infection in any part of the body?
- Have you had a flu or any other vaccination within the last week?

The injection may not be done if:

- You have received a flu or any other kind of vaccination within the last week.
- You are scheduled to have spinal surgery.
- If you feel unwell on the day of the procedure.
- There is a possibility you may be pregnant.
- You have a known or suspected allergy to local anaesthetic and/or steroid.
- You have an infection at the proposed site of insertion of the needle.
- You are on Acenocoumarol, Phenindione or Warfarin. These need to be stopped for a period of time, before the procedure. You will need to be given daily injections of a drug called Heparin, as a substitute for these drugs. This needs to be planned beforehand, with the knowledge and involvement of your GP.
- You are on Apixaban, Dabigatran and Rivaroxaban. These medications are prescribed for a definite and possibly long period.

These medications need to be stopped prior to the procedure but depending on the reason for prescribing of the drug, it may not be possible to stop the drug. You may therefore have to wait for the completion of treatment with Apixaban or Rivaroxaban, before you can have the injection done.

- If you are on a medication (other than Warfarin and Rivaroxaban) that thins the blood and you have not stopped taking the drug.

How is the injection performed?

You will be admitted to the Pain Management Unit. The procedure is performed under local anaesthetic and sterile conditions in the treatment room. X-ray or ultrasound is used to ensure correct needle placement.

Facet joint/sacroiliac joint nerve ablation

Your doctor will do a diagnostic block on two separate occasions. You will be asked to fill out a form to tell us about your response to the injection. This is called a pain diary. Your consultant will proceed to the final ablation treatment only if you report significant relief from both injections.

Treatment of painful scar and painful joint

These procedures are done in a similar manner: diagnostic, followed by definitive injection. On the day of the injection, you will be admitted to the unit and asked questions about your general health and medications. Your blood pressure will be checked. You will then be taken to the procedure room. You will have to lie face down or on your back. The position will depend upon the area of the body being treated.

Following cleaning with antiseptic solution, the consultant will inject local anaesthetic to numb the relevant part of your body. This will be followed by insertion of a fine needle. You may need more than one injection. The procedure usually takes between 15 and 30 minutes. Please inform the consultant if you feel pain or discomfort during the procedure and you will be given additional amount of local anaesthetic. You should not feel sharp pain, starting from the site of needle insertion and spreading to surrounding areas. Please inform the consultant if you do.

Please note that sedatives are not administered and the procedure is not done under a general anaesthetic.

What happens after the injection?

You will be taken to the recovery area for a short period of rest. Your blood pressure will be monitored. You can go home once you are able to get out of bed, walk unsupported and feel reasonably comfortable. A relative or a friend should accompany you home and you must not drive for 24 hours even though you may feel able to do so. You should plan on limited activity for 24 to 48 hours after the procedure.

Will I get pain relief straight away?

Some feel immediate pain relief after the injection while others do so after a period of time. Some patients feel sore for a short period before the pain relief develops. If you experience an initial sore feeling, you should take your usual painkillers and rest until it settles.

How long will the pain relief last for?

The amount of pain relief with radiofrequency facet joint ablation is different between individuals. In some the pain relief may be long-term (9 to 18 months) and in others it may only last for a few months. However in the majority of patients it lasts for 6 to 9 months. The procedure can be repeated.

What are the side effects, risks and complications of the procedure?

- Infection of the facet or sacroiliac joint; this may lead to an abscess by the side of the spine or extending into the spine.
- Damage to a blood vessel by the needle, leading to formation of a blood clot within the tissues.
- Nerve damage due to infection, direct damage by the needle or compression by a blood clot or collection of pus.
- The nerve damage may become permanent.
- Allergic reaction to any of the medications used during the procedure.

- Discomfort/pain during the procedure.
- Sore feeling at the site of the injection.
- Short lasting flare-up of pain.
- Failure to provide pain relief.

What happens after the injection?

You will be reviewed 6 to 8 weeks after the procedure to assess your response. You will be scheduled for ablation treatment, if you report a positive response. Please bring your pain diary with you when you attend the follow-up appointment. You will be reviewed after the ablation to assess your response. The procedure can be repeated and you will need to contact your consultant, through your GP, if you want a repeat of the procedure.

Please inform us of any change in your health status and medications, when you contact us for a repeat of the procedure. In particular, please inform us of the following:

- If you have started any medication that thins the blood or prevents clotting.
- If you have developed a new allergy.
- If you have been hospitalised for any kind of medical problem.
- If you are being investigated for a medical problem.
- If you are due a flu vaccination.

What are the symptoms and signs suggestive of nerve damage following radiofrequency treatment of the facet joint/sacroiliac joint?

- Persistent numbness in back and / or leg or legs. The local anaesthetic injected during the procedure will produce numbness in the relevant part of the body. However, this numbness should not last for more than a maximum of 8 - 10 hours.
- Weakness or difficulty of movement, in the leg or legs.

- Numbness in the saddle area and / or difficulty in controlling your bladder and bowel. In other words, you may not be able to sense when you need to go and may not be able to control the urge to go.
- Replacement of the existing pain with pain of a different type. In particular, you may experience sharp, burning or stabbing pain.

What are the symptoms and signs suggestive of nerve damage following ablation treatment for painful scar/joint?

- Severe pain at injection site.
- Numbness in the area of injection.
- Weakness in movements of a joint.

What should I do if I suspect that I have developed this complication?

You should report immediately to the nearest A&E, as you will need immediate medical attention, including the need for further investigations. You may need a scan and possibly referral to a surgeon. When possible, please contact the Pain Management Unit and ask the consultant concerned to be informed of the complication.

Special instruction for diabetics:

The injection may increase your blood sugar temporarily. Please check your blood sugar regularly and frequently for a few days following your injection. Please contact your GP if your blood sugar stays high as you may need the dose of your tablets or insulin modified.

For further information, contact the Pain Management Unit at Montagu Hospital, Tel: 01709 649040.

Email: dbth.painmanagementadmin@nhs.net

Patient Advice and Liaison Service (PALS)

The team are available to help with any concerns/complaints you may have about your experience at the Trust. Their office is in the Main Foyer (Gate 4) of Doncaster Royal Infirmary. Contact can be made either in person, by telephone or email.

The contact details are: Telephone: 01302 642764 or 0800 028 8059

Email: dbth.pals.dbh@nhs.net

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