Pain Service

Denervation

What is a denervation?

A denervation is a procedure that aims to destroy specific nerves to stop the nerves transmitting pain. The nerves are destroyed by heating with an electrical current from a special device, a radio-frequency machine. This treatment is usually done when other injections such as facet joint injections have been effective.

Before the procedure

- The procedure is usually carried out as an outpatient at either Addenbrookes or Ely Hospital.
- Your stay may be between two to four hours and before any treatment begins you will be asked to provide assurance that someone is able to drive you home.
- On arrival, you may be asked to complete questionnaires as part of an audit and to record improvements in pain levels.
- You will be asked to change into a theatre gown and your blood pressure and pulse will be recorded.
- Your doctor will then discuss the procedure with you and ask you to sign a consent form.

The procedure

This information leaflet is to be read in conjunction with the leaflet titled ‘Advice to be read before your Pain Clinic injection treatment’.

- In the treatment room, you may have a small needle (cannula) placed in the back of your hand. This allows the doctor to give you sedation and/or intravenous fluids if necessary.
- A self-adhesive foil plate will be placed on your thigh. This is connected to the radio-frequency machine to make an electrical circuit.
- Once you are lying in the correct position the doctor will clean your back with an antiseptic solution which can feel very cold.
- The procedure will be carried out under x-ray screening.
- Local anaesthetic is injected into your back, which may sting at first, but the area will soon go numb.
- A special hollow needle is inserted into your back. A very thin wire will then be threaded down inside the needle and attached at the other end to the radiofrequency machine.
• You will be asked to say when you can feel a tingling or twitching sensation as the doctor tests the radiofrequency machine on different settings. This is very important as it makes sure the tip of the needle is in exactly the right place.
• The radiofrequency machine settings will then be set to destroy the nerve by heating it for a minute. You should not feel anything.
• This process may be repeated at different points on your spine. A cold spray may be used over the injection site once the procedure is completed.

**Following the injection**

• After the procedure you will be taken to the recovery area where the nursing staff will observe you and monitor your blood pressure and pulse rate.
• You may feel a little drowsy and wish to sleep.
• You will then be offered light refreshment before you leave.

Please ensure that you have arranged for someone to drive you home after this procedure. Failure to do so will result in your procedure being cancelled.

**If you have had sedation, we recommend that you arrange for someone to stay with you overnight and that you do not drive for 24 hours.**

**What to expect afterwards**

• You may find that 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.
• It may help to use a hot water bottle or an ice pack on the affected area.
• Take your regular pain killers as normal.
• Try to keep on the move about the house but do not do anything too strenuous.
• 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 and strengthen your back. The best way is to increase your activity slowly.
• Try not to overdo things on a good day so that you end up paying for it with more pain the following day.

**Follow up**

A letter will be sent to your GP and an appointment to review the effects of the denervation will be posted to you.
Points to remember

- Please bring your glasses if you need them for reading.
- Always bring a list of all current medication.
- Continue taking all your usual medication on treatment day unless advised to omit anything by the pain clinic, such as medications that thin your blood.
- If there is any possibility you may be pregnant please inform the doctor or nurse.

Additional information

The information in this leaflet is not intended to replace your doctor’s advice. If you require more information or have any questions please speak to your doctor or contact the pain clinic. (The number below is generally manned 08:00 to 17:00 Monday to Friday; there is an answer machine out of hours, please leave a message and we will return your call).

Telephone number: 01223 217796

We are now a smoke-free site: smoking will not be allowed anywhere on the hospital site. For advice and support in quitting, contact your GP or the free NHS stop smoking helpline on 0800 169 0 169.

Other formats:

If you would like this information in another language, large print or audio, please ask the department where you are being treated, to contact the patient information team: patient.information@addenbrookes.nhs.uk.

Please note: We do not currently hold many leaflets in other languages; written translation requests are funded and agreed by the department who has authored the leaflet.

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