NHS
Royal Devon and Exeter
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Vertebroplasty

What is a vertebroplasty?

This is an injection of special cement in to the bones in your spine. This is designed to relieve pain and may prevent further collapse of the vertebrae.

Why do I need a vertebroplasty?

Vertebroplasty is used to treat compression fractures of the spine. A compression fracture is where the vertebra (bone of the spine) has collapsed down upon itself.

Compression fractures of the spine can be caused by osteoporosis, or cancer. Your doctor will explain the cause of your compression fractures to you. Vertebroplasty is used when conventional pain relieving treatments have failed.

Who has made the decision?

The consultant team in charge of your case will have referred you on to the radiologist carrying out your vertebroplasty. If after discussion with the radiologist you decide you do not want the test, you can decide against it.

What are the alternatives?

The only realistic alternative is pain relief and to wait for the crush fracture to heal.

Who will be performing the vertebroplasty?

The procedure is carried out by a radiologist (a doctor who specialises in x-ray procedures). The radiologist will explain the test to you before he starts, and answer any questions you may have.

The x-ray equipment is operated by a radiographer. Radiology nurses will also be present during the procedure. These members of staff will introduce themselves at the start of the examination.

Occasionally student radiographers or medical students will be present to observe the procedure.

Where will it take place?

In the fluoroscopy room of the Medical Imaging Department.

How do I prepare for a vertebroplasty?

- A couple of weeks before the procedure you will need an MRI (magnetic resonance imaging) scan. This is done to confirm the presence of compression fractures and allows the doctor to assess your suitability for the procedure.
- After your MRI scan you will be seen by a radiologist who will assess if vertebroplasty is suitable to treat you.
- It is important that you have read the section ‘What problems can occur after the procedure?’ and to ask any questions you have.
- Vertebroplasties can be performed as an outpatient / day case.
- You will have had some blood tests performed before the procedure to check that you do not have an increased risk of bleeding.
- You are asked not to eat for 4 hours prior to the procedure. You may drink a little water.

- You will need someone to drive you home and to look after you for 24 hours.
- Occasionally you may need to stay overnight if necessary.
- If you have any allergies or you have previously reacted to intravenous contrast medium, you must let the doctor know. Intravenous contrast medium is the injection we give you during some scans.
- If you are diabetic, please contact the Medical Imaging Department on **01392 402336 selecting option 2, in-patient enquiries, option 6** X-ray Special Procedures.
- If you normally take any medication to thin your blood (anticoagulation or antiplatelet drugs) such as: **warfarin** / **clopidogrel** / **aspirin** / **non-steroidal anti-inflammatory drugs (NSAIDS** / brufen / ibrufen / nurofen) / **dabigatran** (Pradaxa) / **rivaroxiban** (Xarelto) / **Apixaban** (Eliquis) / **phendione** / **acenocoumarol – then these may need to be stopped or altered. Please contact the Medical Imaging Department on 01392 402336 selecting option 2, in-patient enquiries and then option 6 for X-ray Special Procedures.**
- Other medication should be taken as normal.
- A pregnancy test may be performed on arrival.

What actually happens during a vertebroplasty?

Vertebroplasty is performed in hospital by a consultant radiologist.

He/she will explain exactly what will happen and you will be asked to provide consent. Do not feel afraid to ask about anything that worries you.

The procedure is carried out under local anaesthetic, which numbs the area to be treated, together with some sedative. You will have to lie face down for the procedure. A nurse will be with you throughout the procedure.

A hollow needle is introduced into the crushed vertebrae through the skin of the back. The doctor is able to guide the needle to the correct place by using special x-ray equipment. Surgical cement is then injected into the bone.

Will it hurt?

The local anaesthetic will sting but should make the tissues numb.

How long does the procedure take?

Every patient's situation is different, and it is not always easy to predict how complex or how straightforward the procedure will be. The procedure should take a minimum of 45 minutes, or occasionally it may take longer depending on the number of levels treated. As a guide, expect to be in the Medical Imaging Department for about an hour and a half altogether.

What happens afterwards?

Immediately after the procedure, a CT scan is performed to check the position of the cement. You will then be taken back to the ward or the recovery bay in radiology, where you should rest for a few hours following the procedure. You are likely to have some discomfort in the areas of the wounds. You should tell the nurses if you require painkillers.

You can return to all your normal activities as soon as you feel able. You can bath/shower 48 hours following the procedure. If you are allowed home on the same day you will need someone to stay with you for 24 hours. This is because of the sedation that you will be given.

What will happen to the results?

A report of the procedure will be recorded on your electronic patient record immediately for review by your specialist.

What should I do if there is a problem?

If there is a problem such as increasing pain, fever or inflamed or discharging wounds, it is best to contact your family doctor first, who will refer you to the hospital if necessary. If you are unable to get urgent attention from a General Practitioner, then come to the Emergency Department.

Are there any risks or complications?

As with all surgical interventions there are risks associated with this procedure. The risk of complications occurring is thought to be less than 0.5%.

Reported complications include:

- Pulmonary embolus - cement blocking the blood vessels to the lungs.
- Leakage of the cement can damage the spinal cord, nerves and discs of the spine.
- Allergic reactions to the drugs or cement used.
- Infection.
- Rib fractures.

Finally...

Some of your questions should have been answered by this leaflet, but remember that this is only a starting point for discussion about your treatment with the doctors looking after you. Make sure you are satisfied that you have received enough information about the procedure, before you sign the consent form.

Contact us

If you found reading your leaflet difficult, you do not understand what it means for you, if you have any queries or concerns you can contact us on: **01392 402336** and we can talk it through.

How to get to the Royal Devon & Exeter Hospital at Wonford

Please refer to the enclosed "Welcome to the Medical Imaging Department" leaflet and use the Trusts website for the latest information:

www.rdehospital.nhs.uk/our-sites

For more information on the Medical Imaging Department, please visit our website:

www.rdehospital.nhs.uk/services/medical-imaging-radiology-x-ray

This leaflet was modified with acknowledgment of, and permission from, the Royal College of Radiologists.

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