

## Vertebroplasty

**Radiology Department** 



**Patient information leaflet** 

This leaflet informs you about the procedure known as a vertebroplasty. It explains what is involved and the possible risks.

The benefits and risks of this procedure should already have been explained to you by your doctor. If you have any concerns about the procedure, you should discuss these with your consultant prior to being admitted. You will have an opportunity to ask the radiologist any other questions you may have. Please make sure you do this before you sign the consent form.

## **The Radiology Department**

The radiology department may also be called the x-ray department or diagnostic imaging department. It is the facility in the hospital where radiological examinations of patients are carried out, using a range of equipment.

#### Who does what?

**Radiologists** are specialist doctors trained to interpret x-rays and carry out more complex examinations.

They are supported by **specialist radiographers**, who are highly trained to carry out x-rays and other imaging procedures.

**Radiology nurses** are specialist nurses who will assist the radiologist and care for you throughout the procedure until you are handed back to the ward nurses.

Prior to this procedure being performed, the radiologist will explain what is involved and you will have the opportunity to ask any questions. A written consent will be required. (You should have sufficient explanation before you sign the consent form)

#### What is a vertebroplasty?

Vertebroplasty is a procedure to reduce pain and strengthen a spinal vertebra that has collapsed due to osteoporosis, a fracture or a bone tumour.

This is done by injecting a type of cement into the body of the vertebra in order to prevent further collapse of the vertebra and to reduce pain. This is done under heavy sedation which is administered by an anaesthetist.

## Why do I need a Vertebroplasty?

You have one or more collapsed vertebrae which are causing you pain, and possibly reduced mobility.

# Who has made the decision that I need to have this procedure?

The consultant in charge of your case, and the radiologist carrying out the vertebroplasty will have discussed the situation, and feel that this is the best diagnostic option. However, you will also have the opportunity for your opinion to be taken into account and if, after discussion with your doctors, you do not want the procedure carried out, you can decide against it.

#### Do I need to do anything before my appointment date?

You should have an up-to-date MRI scan of your fracture site. A CT scan may also be required pre-procedure.

Please ring the radiology department if you take Warfarin, Aspirin, Clopidogrel or anything that thins your blood. **If you have Diabetes** – please phone and tell us.

**Ladies**, if there is any possibility you could be pregnant, please contact the department as your appointment will need to be changed or cancelled.

## How do I prepare for a vertebroplasty?

You need to be an inpatient or day case patient in the hospital. You will have been allocated a day bed on either the Day Surgery Unit (DSU) or the Surgical Short Stay Unit (SSSU). The location will be written on the appointment letter accompanying this patient information leaflet.

You will be asked to attend the ward up to **three hours prior** to your appointment to allow bloods to be taken, so the results are available before the procedure. You will be asked **not to eat six hours prior** to the procedure and to **only have clear fluids up until two hours** before the procedure.

You will need to change into a hospital gown and a cannula (small plastic tube) will be inserted into a vein on the back of your hand.

If you have any allergies, you must inform the staff looking after you.

## Can I bring a relative or friend?

Yes, but for safety reasons, they will not be able to accompany you into the x-ray room, except in very special circumstances.

You will need someone to collect you and drive you home after your required amount of bed rest, and someone to stay with you overnight.

## What actually happens during a vertebroplasty?

You will be transported to the department on a bed. For this examination we will need you to lie on your stomach on the x-ray table where you will be made comfortable. During the procedure we will monitor your blood pressure, ECG (heart tracing) and pulse.

The anaesthetist will give you some sedation and painkillers through the cannula in the back of your hand to make you feel more relaxed. It is usual to give antibiotics for this procedure.

**Under x-ray guidance**, the radiologist will place 1 or 2 needles through the skin into the body of the vertebra. The cement is then passed through the needles into the bone and the needles are then removed.

After the procedure, you will be moved back onto your bed and may go for a CT scan to check the placement of the cement.

#### Will the procedure hurt?

You will be receiving strong painkillers so should feel very little discomfort during the procedure. You may experience backache after the procedure.

## How long does the procedure take?

Every patient's situation is different, and it is not always easy to predict how complex or straight forward the procedure will be. It may be over in half an hour, although you may be in the department for about an hour altogether.

#### What about aftercare?

You will be taken back to your ward on a trolley or a bed. Nurses on the ward will carry out routine observations, such as taking your pulse and blood pressure, to make sure that there are no untoward effects. They will also look at the skin entry point to make sure there is no bleeding from it. You will generally stay in bed for a few hours, until you have recovered and then be asked to mobilise.

## What happens next?

All being well, you will be allowed home on the same day. This is dependent on you being mobile, having any pain under control, being able to empty your bladder, eating and drinking as normal and not feeling at all sick or dizzy. You may return to work in 48 hours if you feel able. When you are discharged home, if you experience some discomfort and pain, please take your usual painkillers. If you are at all concerned please contact your own doctor, the radiology department, or if out of working hours, your local A&E department. Your referring doctor will receive a report on the results of the procedure.

## Are there any risks or complications associated with this procedure?

Vertebroplasty is considered a low risk procedure.

Infection is a low risk as you will receive antibiotics during the procedure.

Low dose radiation is used during the procedure, but your consultant has decided that the benefits of having the procedure are greater than any potential risk of exposure to radiation. The radiation dose you receive will be kept as low as possible.

In rare cases a small amount of orthopaedic cement can leak out of the vertebral body. This does not usually cause a serious problem, but exceptionally rarely the leakage moves into a potentially dangerous location such as the spinal canal or lung. This may lead to pressure on the spinal cord, or cause pulmonary embolism (blockage in the lung), requiring an emergency operation.

Rare cases of spinal cord injury, pulmonary injury and death have been recorded during vertebroplasty, but there have been no major complications in our unit.

## What are the benefits of this procedure?

A reduction of back pain should be noticed after a few days, but could take months. This should continue to improve over the next few weeks. An increase in mobility is noted in many patients. The procedure is not effective in relieving symptoms in some people.

## Is there an alternative procedure?

If vertebroplasty fails, the adjacent joints can be injected.

## **Privacy and dignity**

Sometimes tests or procedures, although necessary, can be embarrassing or undignified for patients but we will endeavour to do everything we can to make you as comfortable as possible during your visit to the department.

#### Reference source

www.bsir.org/patients/vertebroplasty-and-kyphoplasty/

#### Other sources of information

#### Additional information

**NICE** guidelines:

www.nice.org.uk/guidance/ta279/chapter/2-Clinical-need-and-practice

#### Information on radiation

www.gov.uk/government/publications/ionising-radiation-dose-comparisons/ionising-radiation-dose-comparisons

#### **Questions and contacts**

If you have any questions or would like to know more about this procedure, please telephone the Interventional Suite Radiology Department.

Telephone: 01483 571122 ext 4596

For further information about Diagnostic Imaging Services at Royal Surrey County Hospital NHS Foundation Trust, please contact:

#### **Royal Surrey County Hospital NHS Foundation Trust**

**Egerton Road** 

Park Barn

Guildford

Surrey

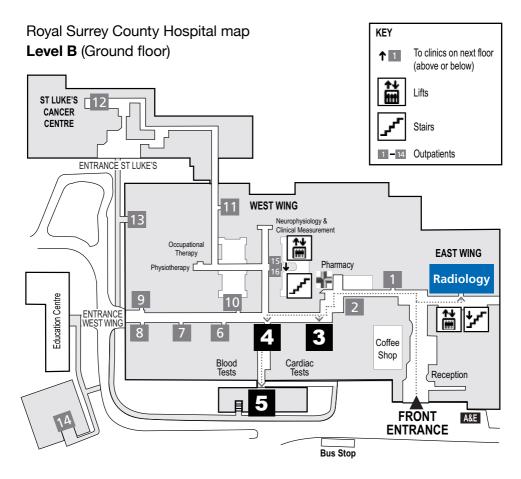
GU2 7XX

www.royalsurrey.nhs.uk

Notes	



## **How to find the Radiology Department**



Data sharing reference information is available on Royal Surrey County Hospital patient information leaflet entitled:

Your Healthcare records – your information, PIN120703-562

## **Royal Surrey County Hospital NHS Foundation Trust**

Egerton Road Guildford Surrey GU2 7XX

www.royalsurrey.nhs.uk

## **Radiology Department contact details**

If you have any questions or would like to know more about this procedure, please telephone the Interventional Suite Radiology Department.

Telephone: 01483 571122 ext 4596

If you are unable to keep your appointment, please contact us as soon as possible.

#### **PALS and Advocacy contact details**

Contact details of independent advocacy services can be provided by our Patient Advice and Liaison Service (PALS) who are located on the right hand side as you enter the main reception area. PALS are also your first point of contact for health related issues, questions or concerns surrounding RSCH patient services.

Telephone: 01483 402757 Email: rsc-tr.pals@nhs.net

Opening hours: 9.00am-3.00pm, Monday to Friday

If you would like information documents in large print, on tape or in another language or form please contact PALS.

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Author: Jann Paton PIN180201–1471

