



Royal Orthopaedic Hospital NHS Foundation Trust Patient Information

Having a Vertebroplasty

What is a Vertebroplasty?

It is a procedure that allows the doctor to inject liquid bone cement material, through a needle, into the vertebrae. The cement acts as a glue and holds your vertebrae together. This will help take the pain away in your back and prevent further damage to your spine. The procedure may be done under sedation, local or general anaesthetic.

What are the alternatives to a Vertebroplasty?

- using medicine to control the pain
- surgical stabilisation of the vertebrae in appropriate patients

Who is a suitable candidate for Vertebroplasty?

People who have suffered recent compression fractures due to osteoporosis or tumours (benign or malignant) that are failing to heal as expected and causing moderate to severe back pain can benefit from vertebroplasty. In some cases, older fractures may be treated successfully, but the procedure is most successful if it is performed within a few weeks to several months after the fracture occurs. The procedure is not used to treat chronic back pain due to other causes, such as arthritis and herniated discs. The vast majority of patients however, have no problems with this procedure.

Will Vertebroplasty treat or prevent loss of height or “widow’s hump”?

After a vertebra has fractured, there is typically a loss of only 20 percent to 30 percent of the height of the bone. But over several weeks, fractures may reoccur and the vertebra flattens out, until eventually there can be a 70 percent to 90 percent loss of height in the bone. Gradually, the back

hunches over and the person loses height, especially if several vertebrae are involved. Vertebroplasty cannot reverse this loss of height or kyphosis (often called “widow’s hump”) in individuals who already have these conditions. Some studies suggest that treatment of spinal compression fractures with Vertebroplasty can strengthen the spine and improve posture, which may help prevent further fractures that lead to height loss or kyphosis. Currently, however, there is no evidence to prove that the procedure will prevent these problems. However, new research on the horizon is looking at ways to solve these problems. It should also be remembered that Vertebroplasty does not treat the underlying bone loss that can lead to vertebral fracture, and this should be considered also in the overall treatment plan.

How safe is the procedure?

Vertebroplasty is very safe, although as with any procedure, care must be taken to avoid complications. The injection technique has been successfully used for a number of years to treat osteoporotic spinal fractures and other conditions leading to fractures of the spine. For example, it has been used to treat fractures associated with vertebral tumour and blood vessel abnormalities. The bone cement used to stabilize the fractured vertebrae has been shown to be safe through many years of use in joint replacement surgeries and other orthopaedic procedures, although it is slightly modified for this procedure to allow visualization on x-ray.

How successful is Vertebroplasty?

Studies have shown that from 75 percent to 90 percent of people treated with

Vertebroplasty will have complete or significant reduction of their pain.

What are the risks or complications?

Vertebroplasty is a very safe procedure with few risks or complications. In many studies, no complications were reported. As with any medical procedure, the possibility of complications will depend on the individual patient. For example, patients with tumours in the spine or with other serious medical conditions may be at higher risk for complications from vertebroplasty. In a very small minority of patients the cement can leak into the lungs and cause some breathing problems, or into the spinal canal and press on the nerves or spinal cord, causing some weakness in the legs, very rarely serious problems can occur. This is quite uncommon, and you may rarely need a second operation to decompress the nerves if this happens. Unusually also, the needle may result in some air going into the chest cavity, and a second procedure may be needed to relieve this.

What can I expect before the Vertebroplasty?

- You will be seen by one of our doctors and/or nurse clinicians, who will obtain a health history, perform a brief physical examination, explain the procedure, and answer your questions.
- You will have x-rays and an MRI (magnetic resonance image) examination of your spine and/or a bone scan.
- You may require blood tests and an IV (intravenous catheter)
- You will sign a consent form.

Who will perform the Vertebroplasty?

A Radiology Consultant or one of the surgeons in the spinal team, who have been specially trained in the technique.

Preparing for Vertebroplasty

Remember to tell the doctor or nurse if you are on any blood thinning drugs (warfarin, heparin etc).

How long will my hospital stay be?

Patients may be treated as a Day Case or may require an overnight stay so make sure you have your discharge arrangements sorted out prior to admission. You may need to have someone at home with you for a few days after the procedure, or arrange to go and stay with someone you know for a few days.

Activities following Vertebroplasty

You are usually able to walk soon after the procedure and you should be able to resume your usual activities as far as comfort allows.

What happens next?

You will usually be seen 6 weeks after the procedure for a follow up appointment in our out-patient clinic in order to review your progress. If you have any concerns or questions prior to this appointment you can contact the medical team on Ward 1 on 0121 685 4282.

Contact information

If you have other concerns regarding the procedure, or wish to access a member of the multi-disciplinary team, please contact with Ward 1 or the keyworker.

Contact details

Ward 1 (spinal) 0121 685 4282

Keyworker / Macmillan Spinal Oncology ANP

Nicky Adams 0121 685 4000 ext. 55733

Additional questions

Please use this space if you wish to note down any questions you would like to ask the team.
