

## Thermocoagulation of Osteoid Osteoma

Information for patients, relatives and carers

ⓘ For more information, please contact: Radiology Department,  
York Hospital, Wigginton Road, York, YO31 8HE, Telephone: 01904 721774

### About this leaflet

This leaflet tells you about the procedure known as 'thermocoagulation of osteoid osteoma', explains what is involved and what the possible risks are. It is not meant to replace the informed discussion between you and your doctor, but we hope you find the information helpful.

Contents	Page
What is an osteoid osteoma? .....	2
What is thermocoagulation of osteoid osteoma? .....	2
Why do I need this treatment? .....	2
Who has made the decision? .....	2
What kind of anaesthetic will I have? .....	2
Are there any risks or complications? .....	3
How successful is the treatment? .....	3
Are there any alternatives? .....	4
What happens before the treatment? .....	4
What actually happens during the treatment? .....	5
What happens after the treatment? .....	5
Finally .....	5
Tell us what you think of this leaflet.....	6
Patient Advice and Liaison Service (PALS).....	6
Teaching, training and research.....	6
Leaflets in alternative languages or formats .....	6

## **What is an osteoid osteoma?**

An osteoid osteoma is a small collection of blood vessels, bone cells and nerves that can occur in almost any of the bones of the skeleton. Although this abnormality usually measures less than one centimetre in diameter and is entirely benign (non-cancerous), it produces persistent and often severe pain.

## **What is thermocoagulation of osteoid osteoma?**

Thermocoagulation involves the placement of a thin needle into the centre of the osteoid osteoma. The treatment is carried out under a general anaesthetic (while you are asleep). To enable accurate placement of the needle, a tiny incision (cut) is made in the skin, and a small hole is drilled into the bone using a CT scanner. The needle tip is heated to a temperature that destroys a 1cm zone of tissue but does not damage any tissue beyond this area.

## **Why do I need this treatment?**

You will have had other tests such as scans and x-rays. These will have shown that there is an abnormal area in a bone that has the typical appearances of an osteoid osteoma. By destroying this small area of tissue within the bone we expect to remove the source of the pain.

## **Who has made the decision?**

The consultant in charge of your care feels that this is the most appropriate form of treatment. Please speak to your medical staff about any concerns you may have, your views are very important to us. If, after discussion with your doctors you do not want the procedure carried out, then you can decide against it.

## **What kind of anaesthetic will I have?**

A general anaesthetic is required as the treatment would otherwise be painful. A specially trained doctor (an anaesthetist) will be present during the procedure. The anaesthetist will put you to sleep for the procedure and then wake you up again at the end.

Provided you are well you will normally be able to go home the morning after the procedure.

Usually, you will need to continue taking pain relief for several days after the treatment.

You will be given an appointment to return to the outpatient clinic a few weeks after the treatment to make sure that it has been successful.

## **Are there any risks or complications?**

This treatment is a very safe procedure. However, there are complications that can arise as with any medical treatment.

There is sometimes a small amount of bleeding following the treatment. In the very unlikely event of this continuing for longer than usual, an infusion of saline (salt water) or, very rarely, a blood transfusion may become necessary.

Depending on the precise site of the bone abnormality that is being treated, there may be a small risk of damage to adjacent structures, for example nerves or blood vessels.

Further information about this will be given during discussions with your doctor, before you sign a consent form.

Despite these possible complications, this treatment is very safe, and the risks are outweighed by the benefits.

## **How successful is the treatment?**

Like any treatment, this does not have a 100 percent success rate, but it is at least as successful as any other available treatment for this condition. By far the majority of patients require a single treatment, although around 10 percent may require a second treatment, particularly if the osteoid osteoma is larger than usual.

## **Are there any alternatives?**

The main alternative treatments are removing the osteoid osteoma under CT guidance with a large needle which takes out a block of bone including the abnormal area, or a surgical operation, again to remove a block of bone that includes the abnormal area.

Both procedures are more traumatic to the tissues and therefore would mean a longer stay in hospital and recuperation at home while the area of bone removal heals. This is not necessary with the thermocoagulation treatment.

## **What happens before the treatment?**

This procedure involves several teams across the hospital and is likely to take two to three months to arrange. Once we have agreed a date with you, an appointment will be made with the anaesthetic pre-assessment nurses to discuss your medical history.

In the two weeks prior to your treatment date, you will be invited to York Hospital to meet with the radiologist (doctor performing your procedure) to answer any questions you may have and to sign a consent form. We may also arrange for blood samples to be taken at this visit.

Because the treatment is performed under general anaesthetic you will be asked to follow the three rules below.

You should have no food or cloudy drinks during the six hours before your admission. You should drink plenty of clear fluids (those you can see through) until two hours before your admission. You should not have anything to eat or drink during the two hours prior to your admission.

You will be admitted to a ward in the hospital on the day of the procedure. A member of staff will see you and take a short medical history from you. You can ask any questions that you may have about the procedure.

Please remember that the hospital staff are here to help you. If you have any questions or worries at any stage, then please ask.

## **What actually happens during the treatment?**

The treatment will be performed in the x-ray department in the CT scanning room. The CT scanner is used to ensure that the treatment needle is placed in the correct position. The treatment is performed by a Radiologist (a doctor specialised in the use of x-ray and scanning equipment) with you lying on the CT scanner table. A nurse and radiographer will assist with the treatment.

The anaesthetic is given in the CT scanning room. Once you are asleep, the radiologist will clean your skin with antiseptic. The radiologist will make a tiny incision (cut) and drill a small hole into the bone to reach the osteoid osteoma. The drill is then removed and the treatment needle inserted. During needle positioning the radiologist may take several pictures with the scanner to make sure that the needle is in the correct place.

Local anaesthetic will be injected around the needle insertion site.

Afterwards a small dressing will be placed over the area, and the anaesthetist will start to wake you up, and transfer you to a recovery room.

## **What happens after the treatment?**

Once you have recovered from the general anaesthetic, you will be taken back to the ward on a trolley with a nurse to escort you. The local anaesthetic tends to numb the area for approximately six to seven hours.

Careful attention is paid to ensuring that you have adequate medication to relieve pain following the procedure, but please let a member of the nursing staff know if you find that you are in pain.

Depending on how you feel, you may eat and drink following the procedure.

## **Finally**

We hope that this leaflet has answered many of your general questions. You should feel free to discuss the procedure, the possible risks and benefits in your particular case with the medical staff. Please make sure you are satisfied that you have received enough information about the procedure before you sign the consent form.

If you have any queries, please telephone the Radiology Interventional Co-ordinators on 01904 721774.

## **Tell us what you think of this leaflet**

We hope that you found this leaflet helpful. If you would like to tell us what you think, please contact: Dr C Davies, Consultant Radiologist, Radiology, York Hospital, Wigginton Road, York, YO31 8HE or telephone 01904 726674.

## **Patient Advice and Liaison Service (PALS)**

PALS offers impartial advice and assistance to patients, their relatives, friends and carers. We can listen to feedback (positive or negative), answer questions and help resolve any concerns about Trust services.

PALS can be contacted on 01904 726262, or email [yhs-tr.patientexperienceteam@nhs.net](mailto:yhs-tr.patientexperienceteam@nhs.net)

An answer phone is available out of hours.

## **Teaching, training and research**

Our Trust is committed to teaching, training and research to support the development of health and healthcare in our community. Healthcare students may observe consultations for this purpose. You can opt out if you do not want students to observe. We may also ask you if you would like to be involved in our research.

## **Leaflets in alternative languages or formats**

If you would like this information in a different format, including braille or easy read, or translated into a different language, please speak to a member of staff in the ward or department providing your care.

Patient Information Leaflets can be accessed via the Trust's Patient Information Leaflet website: [www.yorkhospitals.nhs.uk/your-visit/patient-information-leaflets/](http://www.yorkhospitals.nhs.uk/your-visit/patient-information-leaflets/)

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