CT guided facet joint injection

Radiology Department
The leaflet tells you about having a computerised tomography (CT) guided facet joint injection. It explains what is involved and what the possible risks are. It is not meant to replace informed discussion between you and your clinician, but can act as a starting point for such discussions. If you have any questions about the procedure please ask the consultant who has referred you for the test or the Radiologist who is going to perform it.

**The Radiology Department**

The Radiology Department may also be called the x-ray 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, who will collect you from CT.

Prior to this procedure being performed, the Radiologist will explain fully what will happen and allow you to ask any questions.

A written consent will be required. (You should have sufficient explanation before you sign the consent form)

This confirms that you understand the risks, benefits and possible alternatives to the procedure and have given your permission for it to go ahead.
What is a CT guided Facet joint injection?

The spine is made up of bones called vertebrae. They are separated by strong shock absorbers called discs, which allow the spine to bend. The facet joints link the vertebrae together, and help to stabilise the spine and control the degree of movement as well as carrying some of the load. With age, they become more prone to injury and wear and tear, and are a common cause of lower back pain.

A CT guided facet joint injection is an injection of a combination of local anaesthetic and steroid around one (or more) joints in your spine using the CT scanner to localise the area of interest.

The procedure takes approximately 20–30 minutes.

Why do I need a CT guided facet joint injection?

Facet joint injections can be used to both treat and diagnose back pain. To diagnose whether or not a facet joint is the cause of your back pain, local anaesthetic can be injected into the joint. You may also have a steroid medicine injected at the same time. If your pain improves within a few hours or a couple of weeks, this suggests that the facet joint is causing your back pain.

The steroid medicine can also treat pain, inflammation and any restriction of movement caused by wear and tear.

It can take between seven and 10 days to feel the full benefits of a steroid injection. The effects of a successful injection can last anything from a few days to a month, but the benefits rarely last longer than six months. Facet joint injections may reduce your pain enough to allow you to do some exercise and stretches.

Facet joint injections are usually only done if you have had back pain for longer than six weeks and you have tried other conservative treatments suggested by your doctor, such as painkillers or physiotherapy. They aren’t done if you have an allergy to local anaesthetics or steroids.
Who has made the decision?

The consultant in charge of your case, and the Radiologist doing the facet joint injection will have discussed the situation, and feel that it is the best thing to do. However, you will have the opportunity for your opinion to be considered, and if, after discussion with your doctors, you do not wish the procedure to be carried out, you can decide against it.

Before your appointment

You may be asked to stop taking certain medicines before your facet joint injection. You may also be asked not to take any pain relief medicines for at least four hours before the procedure.

Please ring the radiology department if you take warfarin, aspirin and clopidogrel or anything that thins your blood.

Who will be doing the facet joint injection?

A specially trained doctor called a radiologist. Radiologists has special expertise in using x-ray and scanning equipment, and also interpreting the images produced. They need to look at the images whilst carrying out the facet joint injection.

You will have been allocated a day bed on either the medical day unit (MDU), 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 3 hours prior to your appointment to allow bloods to be taken and the results available prior to the procedure.

You will be asked not to eat for 4 hours but can drink water up to 1 hour prior to the procedure, unless otherwise advised.

You will be asked to put on a hospital gown and a cannula will be placed in a vein usually on the back of the hand.
If you have any allergies, you **must** let the staff looking after you know. If you have previously reacted to intravenous contrast medium (the dye used for kidney x-rays and CT scans) then you must tell the radiographers.

**Can you bring a relative or friend?**

Yes, but for reasons of safety, they may not be able to accompany you into the examination room, except in very special circumstances.

You must have someone to collect you and drive you home after your 4 hours bed rest.

**What actually happens during a facet joint injection?**

You will probably be asked to lie on your stomach to have your facet joint injection. Your skin will be cleaned at the site of the injection with a sterile antiseptic wipe. Local anaesthetic may be injected into your skin prior to insertion of the needle. The radiologist will use the CT scans to decide on the most suitable point for inserting the needle.

The Radiographers will accurately mark this point with an indelible pen using the centring lights on the scanner to guide them.

A thin needle is passed through the skin of your back into the facet joint. Your consultant may inject a special dye (contrast medium) into the joint first. This will show on the CT scan whether or not the needle is in the correct place. The steroid and local anaesthetic mixture is then injected into the joint. You may be asked during the procedure whether you feel any pain.

You must keep as still as possible during this stage, if it becomes too uncomfortable please let us know.

The treatment usually only takes a few minutes and more than one joint can be injected during the same session.
Is there any alternative treatment?

There is conservative treatment such as physio & /or pain relief, which most of our patients will have tried prior to referral for this procedure.

Will it hurt?

Facet joint injections can be uncomfortable because they are given in an area that may already be painful.

There will be a nurse and radiographer looking after and monitoring you throughout the procedure.

What happens afterwards?

After a local anaesthetic it may take several hours before the feeling comes back into the treated facet joints. Take special care not to bump or knock the area. You should be able to walk immediately after the procedure, although some people have some tingling or numbness for a few hours.

Your doctor may ask you to perform a task that usually causes you pain to assess how much pain relief you have got from the procedure.

You will be taken back to your ward on a trolley accompanied by a nurse.

Nurses on the ward will continue to carry out observations, such as your heart rate and blood pressure to make sure there are no problems.

You will stay in bed for a few hours until you have recovered and are allowed to go home.

Recovering from facet joint injections

After facet joint injections, you should rest your back for 24 hours. This means that you should take it easy, but you shouldn’t stay in bed. Within the first few days you should start to move your back as usual. You may experience an increase in your symptoms for up to two weeks after your facet joint injection, particularly if you had a very painful back before the procedure. You must follow your doctor’s advice about returning to work and exercise.
If you need pain relief, you can take over-the-counter painkillers such as paracetamol or ibuprofen. Alternatively, you may want to use ice or a bag of peas, wrapped in a towel, to numb the area. Don’t apply ice directly to your skin as it can damage your skin.

It can take up to two weeks for the injection to take effect.

During the first few days, if you feel unwell or develop any of the following, contact your doctor or hospital immediately:

- a fever or high temperature
- severe pain or a headache
- loss of bladder or bowel control
- redness around the injection site

**Are there any risks?**

Facet joint injections are commonly performed and generally safe. However, in order to make an informed decision and give your consent, you need to be aware of the possible side-effects and the risk of complications of this procedure. You will be exposed to some X-ray radiation during facet joint injections. The amount of radiation you will be exposed to will depend on the number of X-rays you need to have done and how many facet joints need injecting.

**Are there any side effects?**

These are the unwanted but mostly temporary effects of a successful procedure. After a facet joint injection you may feel more pain and tenderness in the area. You may also have some bleeding or an infection.

The steroid injected into the facet joint may also cause some side-effects in a very small number of people. These can include:

- fluid retention
- weight gain
- high blood pressure
- mood swings
- insomnia
**Possible complications**

This is when problems occur during or after the procedure. Most people are not affected. The possible complications of any operation include an unexpected reaction to the anaesthetic, infection or excessive bleeding.

Complications of facet joint injections are rare but can be serious.

One possible complication of any injection into the spine is that the treatment goes into the wrong part of the spinal cord. This can cause a drop in your blood pressure or widespread numbness. Your doctor will monitor you constantly, and will be able to notice this quickly and provide appropriate care. The risk of this is minimised by the use of X-rays.

Other possible complications include inflammation of the nerves in your spine, and damage to nerves or tendons near the joints being injected. There is also a very small risk of infection in the joints.

The exact risks are specific to you and differ for every person, so we have not included statistics here. Ask your doctor to explain how these risks apply to you.

**Privacy and dignity**

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

**Patient surveys**

We value your opinion on our service and in order to deliver, maintain and improve this service we ask you to complete a short patient questionnaire survey found on the appointment letter.

Completion of these surveys is entirely voluntary.
Questions and contact details

Following the examination, if you experience any problems please contact the CT Department between 08:30 and 17:00. Outside these times please contact your GP.

If you have any questions or would like to know more about this procedure, please telephone the CT Department on:

**Telephone:** 01483 464151 (Direct line)

**Telephone:** 01483 571122  Ext 4151 / 4414

If you are unable to keep your appointment notify the CT scanner clerical staff as soon as possible.

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
Key reference sources

Websites

■ NICE
  http://www.evidence.nhs.uk/search?q=facet%20joint%20injection

■ Patients guide to Facet joint injections
  http://www.eorthopod.com/facet-joint-injections/topic/184

■ NHS Choices
  http://www.nhs.uk/Search/?q=facet+joint+injections

■ Radiation Dose Information
  https://www.gov.uk/government/publications/ionising-radiation-from-
  medical-imaging-examinations-safety-advice/exposure-to-ionising-
  radiation-from-medical-imaging-safety-advice
How to find the Radiology Department

Royal Surrey County Hospital map
Level B (Ground floor)

A data sharing reference: Your Healthcare records – your information PIN120703-563
Contact details

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Royal Surrey County Hospital (RSCH) NHS Foundation Trust fully subscribes to the National Patient Safety Agency (NPSA) *Being Open* best practice framework, November 2010.

**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 in far left corner 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–4.00pm, 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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