



Thoracic Facet Injections

1 Introduction

Before you agree to have your thoracic facet injections, it is sensible to know all you can about it. This means knowing why you may need facet injections, what the procedure is, and what it will be like, if there are any risks, and if there are any alternatives. Even if you are not keen on the details, getting an overall picture is helpful.

This leaflet is a good starting point. It does not cover everything, so do mention any particular worries you may have. Ask for more information at any time. Patients, their pain problem and treatments all vary to a degree. But the leaflet should help you make the best decision.

You will need to sign a consent form. This will happen just before the procedure at the hospital. This consent form records what you have agreed to. It is flexible enough to cover the unexpected. Please make sure everything is quite clear to you. Mention anything you do not wish to have done. You can change your mind even after signing the consent form.

What are facet joint injections?

Facet joints are pairs of small joints that hold the bony blocks (vertebrae) of the spine together. They help keep the spine straight and firm to hold your body weight. At the same time they allow limited movement so that you can bend, stretch and rotate. They are arranged in pairs all the way from the top of your neck, to just below your waist.

With injury or simple 'wear and tear' these joints can become painful. Injections into these joints are used to treat pain in that area. The injections are usually given into the lining of the joints where there is a soft membrane called synovium. The synovium can become inflamed and cause pain. This pain can lead to muscle spasm or tightness, in the upper back, which can produce even more pain.

By targeting the painful area, facet joint injections 'bathe' the joints in local anaesthetic and steroid solution. Only a small amount of slow release steroid is needed and it will not cause any of the side effects sometimes associated with taking steroid tablets. They are not the same kind of steroids that athletes may take. Gaining weight from steroids administered by injection is not impossible, but very rare.

This steroid injection relieves pain and inflammation. In this way, pain from inflamed joints can be treated and the muscles made to relax and work properly again.

What is the problem?

You have inflamed facet joints in your back. The pain may be felt in the chest at the back and is worse on holding a fixed position for any length of time. This pain can also be worse when you extend the spine, as when you straighten up from doing up your shoelace. The pain is usually reduced by keeping on the move. Sometimes the pain may be 'referred', or 'spread' to the ribs, shoulder blades or down towards the lower spine.

What has gone wrong?

You have suffered degeneration or damage to the facet joints in the upper part of your spine. When the joints are inflamed, the nearby muscles become irritated and go into spasm or cramp up. Movement is then reduced. This is the body's natural response to try and 'protect or defend' the spine while it tries to heal. However, if the spine cannot 'heal itself' then this spasm becomes unhelpful and indeed part of the problem.

The aims

The aim is to reduce the inflammation of the joints. This reduces the back pain. The pain that spreads to your ribs or shoulder blades should also be reduced. You should have a reduction in your pain and be able to move around more easily. In this way you can exercise to prevent this happening again. If successful, it can avoid the need for surgery.

Are there any alternatives?

By the time that you are having the facet joint injections you should have already tried other more simple treatments. These include rest, both pain-killing and anti-inflammatory tablets and physiotherapy with 'core strengthening' exercise, that build up the spine support structures.

What if you do nothing?

If you do nothing there are several things that may happen:

1. With time and rest the inflammation and pain may settle on its own.
2. The pain and difficulty in moving around may remain the same.
3. The pain may increase and spread to other parts of the spine.
4. Your posture may get worse, making walking, sitting and sleeping more difficult.

Who should not have the injections done? (Contraindications)

Each patient has the final decision to proceed or not. If you are unhappy about the procedure for any reason, you should not continue. There are specific medical situations when facet joint injections should **NOT** be done and they are as follows:

1. Medication or an illness that prevents the patient's blood from clotting, such as Aspirin, Warfarin, or other medications. These medications need to be stopped before the injection takes place, often 5 or more days before.
2. Infection of the skin over the site where the needle needs to be put in.
3. If you feel unwell generally, perhaps with viral symptoms and particularly if you have an active cough.

2 Preparation**Getting ready - At home**

The procedure is usually planned in advance. It is important to contact your medical insurance company, if you have one, to confirm that they will authorise the procedure. Make sure that you know what time and where in the hospital you must report to on the day of the procedure to avoid being late. Bring all your medicines, tablets and inhalers in their original packets with you.

Have nothing to eat or drink in the 6 hours before the procedure, this is to keep your stomach empty and stops you feeling nausea during the procedure. This is also a routine safety procedure when sedating drugs are given to patients in a drip. If you are on regular tablets, take them as normal, with a small amount of water.

If you are on Warfarin, Aspirin, or any drug that thins the blood, please ring me or Nicola to discuss this before your injection.

In most hospitals this procedure is a 'day-case' procedure and you can go home afterwards. You will need a friend or relative to take you home afterwards and it is advisable to avoid public transport. On occasion you may need to stay in the hospital overnight.

Getting ready - In hospital as a planned procedure

Facet joint injections take place in a special day unit within the hospital. This is where there is an operating theatre, with access to an x-ray machine.

When you arrive, please report to the unit's reception, where one of the nurses will ask you some questions to check your health and give you a hospital gown to change into.

When I am ready, you will be taken to the procedure room. I will explain what will happen and ask you to confirm your signature on a consent form. A special x-ray machine may be used to help me place the needles. For this reason it is important to tell me if you may be pregnant, as x-rays may harm a growing baby. In addition a dye may be injected that contains iodine, to show that the needle is correctly placed. If you have an allergy to iodine, tell me or the nurse.

3 The Thoracic Facet Joint Injection Procedure

The anaesthetic

The facet injections do **not** require a general anaesthetic. Quite often light sedation is given into a vein, this is to make patients feel more relaxed, comfortable and to help prevent muscles going into spasm. Some people undergo the procedure with just the use of local anaesthetic, but only if they prefer to do so.

The procedure

Once in the theatre suite you will be connected to some monitoring equipment to measure your heart rate, blood pressure and the oxygen content of your blood. A needle or 'drip' will be placed in a vein, usually in the back of the hand. Then you will be asked to lie face down on your tummy. Being in a comfortable position is very important when this procedure is done.

When this is achieved your back will be cleaned with antiseptic solution, some local anaesthetic will be introduced into the skin. When the skin has gone numb a needle will be introduced into the back very slowly and carefully. Once the needle is in the correct place in the painful joint, a single dose of medication will be injected and then the needle will be removed. This process will be repeated several times, depending on how many joints are involved. You will require one injection for each joint. If the pain affects both sides of the spine then you will naturally need injections on both sides.

When the injections are completed, you will then be positioned in a way to make you as comfortable as possible.

How long does it take?

Facet joint injections usually take about 20-30 minutes. With time in the recovery area, you are likely to be in the treatment area for an hour or so.

Will it hurt?

The uncomfortable part of the procedure is when the needle is placed through the skin and soft tissues of the back. I will usually inject local anaesthetic into the skin with a tiny needle. This can transiently produce a mild burning sensation before the skin goes numb. Then the larger treatment needle can be pushed through without discomfort. In addition, it is possible to give small quantities of painkillers and sedation into a drip to make you feel comfortable while this is happening. Apart from this, the procedure should be pain free.

4 Risks and complications**Common complications**

Facet joint injections are a very commonly performed procedure but as with all medical procedures there are some risks. Complications that are minor and occur quite frequently include:

- Bruising of the skin and under the surface.
- Feelings of nausea or sickness. These can be treated with anti-sickness drugs.
- Mild to moderate discomfort. This can normally be treated by giving small doses of painkillers into the drip.
- A flare-up of your original symptoms for a few days. This is usually due to muscle bruising where the needles go in.

Rare complications

- Infection. It is extremely uncommon but sometimes an abscess may form around a joint where a needle is inserted.
- Pain. Sometimes patients complain of worsening of their pain, or a new pain. It is difficult to explain this as there is rarely anything new to find on examination.
- You may suffer an allergic reaction to any of the medications.
- Nerve damage and weakness.
- The injected steroid or cortisone may cause disturbance of other body hormones.
- Unexpected death.

What about the contraceptive pill and Hormone Replacement Therapy (HRT)?

In women, the contraceptive pill may double the chance of deep vein thrombosis and possibly travelling into the lungs. The chance is small, possibly 1 in 500, for a clot in the lungs, but giving an exact figure is difficult. Many other things play a part, such as being over 40 years of age, being overweight, and blood clots in the past. Hormone replacement therapy (HRT) has the same effect, but less so.

This procedure does not require a general anaesthetic and so there is no additional risk to forming a clot. There is no need to stop taking the contraceptive pill or HRT.

5 Recovery**Will it be painful?**

You may feel a little stiff and uncomfortable from lying on the theatre trolley or table. The muscles around the injection area may feel a little bruised. Simple painkillers will control this pain.

Recovery - In hospital

You will be taken from the theatre to a recovery area. The recovery nurse will take usual measurements of your pulse, blood pressure and rate of breathing to keep you safe.

The nurse will regularly check to make sure your pain control is adequate. If necessary pain-killing tablets or injections may be given.

When the nursing staff are happy that your observations are normal and that you are feeling well, you will be taken to a 'step-down' area. Here you can sit in a chair and have a drink and a light snack. When feeling able, you may get dressed. Before you leave, one of the nursing staff will give you, if necessary, some tablet painkillers.

Procedure follow-up appointment

A routine appointment will be made for you to come and see me approximately 4 weeks after your procedure. This appointment is to make sure that you are progressing well and to discuss further treatment. Nicola will phone you for an update and make the appointment, telling you when and where to come. If you have concerns or a particular commitment to cater for, then please contact Nicola directly.

At home

When you get home it is important to take things easy and get plenty of rest. If you have received medication into a drip, you must not drive or operate machinery for 24 hours. During the facet injections, the needle is placed into the area where the pain comes from. It is not unusual for the pain to 'flare-up' for a few days before it settles and the benefits come through. During this time, simple pain-killing tablets are helpful. It is also wise to keep on the move. Do not take to your bed, or spend long periods in any one position. Do some gentle stretches as recommended by your physical therapist and go for short walks.

Additional Information

- Diabetic people may notice their blood sugar levels are higher than normal in the week following the injections.
- Some people will experience their pain getting worse before it gets better.
- If severe pain develops, or you notice a high temperature or redness or swelling at the injection point, or any significant weakness, you should seek medical advice immediately.

Long term outlook

Facet joint injections are one part of the solution to your pain. It will reduce inflammation and take your pain down levels down over a period of weeks. The anti-inflammatory drug will continue to work for about 4-8 weeks. You should not expect the pain to disappear 'overnight'. Once the steroid has been broken down and removed from the body, the pain should remain significantly reduced. During this time it is up to you to make the most of it. After one week you should perform the stretches and exercises shown to you by your physiotherapist. Gently increase your activity without overdoing it. You should not be doing any fixed position, heavy or excessive exercise in a gymnasium or lifting heavy bags.

Simple exercise such as using an exercise bike or swimming on your back will help to increase your muscle tone and strengthen your back. You should already have an exercise regime from your therapist, if not, now is the time to start. The best way is to increase your activity slowly. Try not to overdo things on good days, or you may end up paying for it with more pain the next day.

However, there is a chance that the pain will not improve, will change or will get worse. Some patients will need to have further facet joint injections. Those patients who get little or no benefit will have to consider other treatments. In a small group of patients this will involve a surgical operation.

If the pain responds well to the injections but keeps on returning, there is another procedure that can be employed to significantly increase the duration of the relief. This is called a 'facet joint denervation'.

It is always wise to find out as much as possible about your procedure. It may be worth discussing the treatment with your general practitioner, getting a second opinion from another specialist, or searching the Internet. By the time you undergo the procedure you should feel fully informed about what is proposed for you and why.

What do I do if I am unwell after the procedure?

- If it is between 09.00-17.00 Monday to Friday call Nicola on 020 3475 7799.
- Out of hours call The London Clinic on 020 3475 7799 and ask for Matron's Office, who will contact me.
- In an emergency – Call an ambulance.