

Imaging department

# Having a musculoskeletal (MSK) ultrasound scan and injection

Information for patients, relatives and carers

## Introduction

You have been referred for an ultrasound of a joint, tendon or soft tissue to try to understand why you have pain or discomfort in that area (a diagnostic scan). Your doctor has also asked the radiologist (specialist doctor) to consider giving you an injection of local anaesthetic and steroid in or around the painful joint or tendon to try to relieve the pain or discomfort you are experiencing.

If this leaflet does not answer all of your questions and you have any concerns, please discuss these with the doctor on the day of the examination.

## What is an ultrasound scan?

Sound travels in waves. Ultrasound is sound which travels at a higher frequency than we can hear.

Ultrasound scans are done by building up pictures from the return of sound waves as they bounce back from any resistance they meet. The sound waves can be directed to and bounced back from the surfaces of various structures within the body to form pictures on an ultrasound monitor.

The ultrasound waves are sent to and from the body by moving a transducer (probe) over the surface of the skin of the area to be examined. Images (pictures) are taken for interpretation by doctors and sonographers trained in this speciality.

Ultrasound scans can be used to diagnose a variety of conditions. They are also used to guide the position of needles for injections.

## What is an ultrasound guided injection?

Your doctor will have already discussed with you why he/she recommends you should have an injection.

The skin is cleaned with an antiseptic solution. This may stain your skin but will wash off after a few days.

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The radiologist may give you an injection of local anaesthetic to numb the area. This will cause a stinging sensation as it is injected but this quickly wears off.

A fine needle is then used to inject the corticosteroid using the ultrasound imaging as guidance.

Corticosteroid is used to treat inflammation (swelling) and pain arising from or around a joint, tendon or soft tissue. The injection may also contain a local anaesthetic agent.

## Is there anything I need to do before my appointment?

There is no preparation for this test. You can eat and drink as normal.

You can take all your medications as usual. If you are on blood-thinning tablets (such as warfarin or aspirin), please continue taking them as usual provided they are being monitored appropriately.

Please tell us if you are taking any **anti-retroviral medications** as these can affect treatment.

Please also let us know if you are allergic to steroids and any other medications or substances (e.g. latex) before your appointment.

If you are **pregnant**, think you may be pregnant or breast feeding, you must notify the imaging staff.

Please tell us if you are feeling unwell, have recently been admitted to hospital or have any other health worries.

## What are the risks and benefits of having an injection?

An ultrasound guided injection is a common procedure.

There are some complications or risks associated with the procedure:

- **pain** - sometimes the steroid injection can make the pain or discomfort temporarily worse. We call this a **Steroid Flare**. This can be more painful for approximately two to three days after injection. You may take your regular pain killers to provide relief during this time
- **discolouration** - very rarely a white dot or patch on the skin can appear after the injection, called '**Depigmentation**'. This is rarely permanent and may last for few months
- **fat atrophy** – this is thinning of the fat, which may result in a dent in the skin
- **skin thinning or skin dimpling** – occasionally the skin overlaying the injection becomes thinned over the course of some months. This is particularly noticeable when several injections are given close to the skin surface. This side effect does not occur in most people
- **tendon rupture** – this is rare but steroids may weaken the tendon so it is important to avoid any strenuous activity or exercises for three to four weeks and use splints or support, if given

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- **infection** – this is very rare. If there is redness or swelling over the injection site or you develop a fever, please see your GP or go to A&E immediately and explain that you have recently had an injection
  - **allergic reaction** is extremely uncommon
  - in patients with **diabetes**, blood sugar can elevate temporarily
  - **no effect** – the injection may not have any benefit

**We have included some common side effects seen in our practice.** However, for all known side effects listed by the medicine manufacturer, you can visit:

- [http://packageinserts.bms.com/pi/pi\\_kenalog-40.pdf](http://packageinserts.bms.com/pi/pi_kenalog-40.pdf)
- <https://www.medicines.org.uk/emc/PIL.9141.latest.pdf>

## Does steroid/corticosteroid injection increase your chance of having infection including viral infections like Covid-19?

Long acting, usually insoluble steroid formulations are frequently used in these injections.

The potential side effect of steroid injection on someone's ability to fight covid-19 infection is still unknown. Therefore, we are not able to advise of increased risks of having any infection associated with these injections. It is important that you discuss the risks and benefits of steroid injection with your referring doctor.

If you would rather not have unknown risks, you may choose to not go ahead with a steroid injection. It is ok to change your mind anytime or even just before the injection.

## Are there any alternatives to this test?

Your doctor will only have requested an ultrasound scan if he/she feels that this is the best way to treat your symptoms. The alternative to injections would have been discussed with you by your referring clinician.

## What happens on the day of my appointment?

If you are already staying in hospital as an **inpatient**, you will be brought down from the ward to the imaging department. If you are having the scan as an **outpatient**, we will ask you to report to the reception in the imaging department. Your appointment letter will tell you which hospital to attend.

Please note, no photography or electronic recording of any kind is permitted in the scanning room.

You may be asked to undress and change into a hospital gown. There is no need to remove jewellery or hearing aids.

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Your scan will be performed either by a doctor specialising in imaging (a radiologist) or a sonographer who is a technician specialised in ultrasound imaging. After confirming your identity, you will be asked you to lie down on an examination couch and the lights will be dimmed so that the pictures on the screen can be seen more clearly. We may ask you some questions about your health before the scan begins.

A water-soluble gel is then applied to your skin. This allows the transducer to slide over the skin easily and helps to produce clearer pictures. Your doctor will discuss the procedure with you before the injection.

The scan normally takes between 15 and 30 minutes to complete, depending upon which parts of the body are to be examined. Please feel free to ask questions during the test.

### Would you like a chaperone?

If you wish to have a chaperone present in the scanning room, please let us know and we will be more than happy to arrange this for you.

### Will it hurt?

The ultrasound scan will not hurt. When you have the injection, you will feel a small needle prick, but it should not be too painful depending on your pain tolerance.

### What happens afterwards?

The gel will be wiped off your skin and you will be able to get dressed.

Rest the area injected for 24-48 hours.

Remove the plaster after 24 hours.

Antiseptic solution may discolour skin pink or orange but will be removed with cleaning.

If you are a diabetic, you will need to keep an eye on your blood sugar levels as these can be raised slightly after a steroid injection. This usually settles after a few days.

We recommend that you do not drive for at least 24 hours after the procedure.

If your scan was done as an **outpatient** appointment or if you have been referred by your GP, you will be allowed to go home. You will get the results of the scan and assess the benefits of the injection when you next see the hospital doctor or your GP. This would usually be in four to eight- weeks.

If you have a scan whilst you are an **inpatient**, you will be taken back to the ward.

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## When will the injection start working and how long will it last?

The symptoms usually improve about three days after the injection but this varies from patient to patient. The benefits of the injection may last for a few weeks or even months. You may need more than one injection to settle the symptoms.

The result of the injection will enable your referring doctor to decide your ongoing treatment with you. Please do try and fill in the pain chart if you are given one at the end of the procedure.

## Is there anything I need to watch out for at home?

Please review the section above titled 'What are the risks and benefits of having an injection'. You should contact your GP if you have a fever or notice redness or swelling around your injection site. This could indicate that you may have an infection. Your GP should be able to treat this with antibiotics.

## When will I get the results?

The person doing the scan is not always able to give you the results immediately, because they need to look at the pictures carefully after the scan.

If your GP requested the examination, you should arrange to see them to get the results approximately two weeks after your appointment.

If your hospital doctor requested the examination, you should receive the results on the ward or at your next outpatient clinic appointment.

## How do I get to the hospital?

Please visit the Trust's website for more information about travelling to our hospitals:  
[www.imperial.nhs.uk/our-locations](http://www.imperial.nhs.uk/our-locations).

## What if I cannot keep my appointment?

Please contact us as soon as possible. We can then offer this date to another patient and agree a new appointment date and time with you.

You will find the appropriate telephone number on your appointment letter.

## Contact details

Please do not hesitate to contact our imaging departments if you have any queries or concerns:

- **Hammersmith Hospital: 020 3313 3389**
- **Charing Cross Hospital: 020 3311 1863**
- **St Mary's Hospital: 020 3312 6418**

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## How do I make a comment about my visit?

We aim to provide the best possible service and staff will be happy to answer any of the questions you may have. If you have any **suggestions** or **comments** about your visit, please either speak to a member of staff or contact the patient advice and liaison service (**PALS**) on **020 3313 0088** (Charing Cross, Hammersmith and Queen Charlotte's & Chelsea hospitals), or **020 3312 7777** (St Mary's and Western Eye hospitals). You can also email PALS at [imperial.pals@nhs.net](mailto:imperial.pals@nhs.net) The PALS team will listen to your concerns, suggestions or queries and is often able to help solve problems on your behalf.

Alternatively, you may wish to complain by contacting our complaints department:

Complaints department, fourth floor, Salton House, St Mary's Hospital, Praed Street  
London W2 1NY

Email: [ICHC-tr.Complaints@nhs.net](mailto:ICHC-tr.Complaints@nhs.net)

Telephone: **020 3312 1337 / 1349**

## Alternative formats

This leaflet can be provided on request in large print or easy read, as a sound recording, in Braille or in alternative languages. Please email the communications team: [imperial.communications@nhs.net](mailto:imperial.communications@nhs.net)

## Wi-fi

Wi-fi is available at our Trust. For more information visit our website: [www.imperial.nhs.uk](http://www.imperial.nhs.uk)

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