

Patient Information Leaflet

Corticosteroid injections

Why are they used?

Corticosteroid (sometimes referred to as “steroid” or “cortisone”) injections are commonly used for the treatment of joint and soft tissue disorders. Steroids can be helpful for easing pain and reducing high levels of inflammation. They may also protect the cartilage within joints. Steroid injections are often used in conjunction with local anaesthetic. There are several different formulations of both steroid and anaesthetic which may be used. As with all medication, an individual’s response to a steroid injection cannot be predicted. Depending upon the medication used, patients will usually experience an improvement in their pain lasting anything from a week to six months or longer. Some patients unfortunately gain little or no benefit. This information sheet is intended to supplement the advice you will be given by your doctor or podiatrist with regard to the role of steroid injections in your particular circumstances. Injections are not suitable for all patients.

You should not be given a steroid injection if you have an active illness or infection, or if there is a possibility you may have coronavirus.

If you have symptoms that may be associated with active coronavirus infection (cough, fever, loss of taste or smell) you should not have an injection and should cancel your appointment and request suitable testing or medical treatment.

Also, before you consider having a steroid injection you must inform your practitioner if you have an:

- Allergy to steroid or local anaesthetic
- Infection close to the site of the proposed injection or a significant infection elsewhere
- Broken skin or rash at the site of the proposed injection
- A tendency to bleed more readily as a result of illness or medication
- Surgical metalwork at the site of the proposed injection, for example a joint replacement, screws, plates etc.

Depending upon the site of injection, ultrasound guidance may be necessary to ensure accurate needle placement, although this is by no means necessary for all injection sites.

After the injection you will be asked to remain in the clinic for about 15-20 minutes. Relative rest is usually advised for a few days afterwards and certainly, strenuous activities should be avoided for a few days, particularly if steroid is injected in the vicinity of a tendon or into a weight bearing joint.

Additional advice and precautions relating to particular injections and procedures will be discussed if necessary at your appointment.

Please report any known allergies (drugs, elastoplast etc) to the doctor prior to the procedure.

How long will it take before I obtain benefit from the injection?

The benefit usually starts after 36 hours or it may build up gradually over a week to 10 days.

A minority of patients will fail to respond to injection, and further treatment options may need to be discussed.

Please note that your pain may be the same, or worse in some cases than before the procedure. This will usually last for 24-48 hours and is part of the normal process.

If the site of the injection starts to become red or inflamed with worsening pain that starts about two days following injection, or if you start to feel unwell following injection, please contact the clinic.

What are the Side Effects and Risks of a Steroid Injection?

The risk of a complication arising from a steroid injection is low and serious complications are extremely rare. However occasionally the following may occur and may require medical attention;

- Some individuals are susceptible to fainting during medical procedures. Faints result from a sudden short term fall in blood pressure. Please inform the doctor or podiatrist in advance if you feel this may be likely so that precautions can be taken.
- Some patients experience deterioration in their symptoms for about 48 hours after the injection. Rest and simple pain killers usually help.
- Infection may be introduced into the joint or soft tissues as a result of an injection. This is extremely rare but can have very serious consequences if not identified and treated promptly. If you experience progressive warmth, swelling or worsening symptoms at the injection site particularly in association with fever, seek urgent medical attention.
- Allergic reaction to the steroid or local anaesthetic. Any medication has the potential to precipitate an allergic reaction even in someone who has previously encountered the same medication without problem. This is most likely to occur within 20 minutes of the injection. You should therefore remain in the clinic for 20 minutes following your procedure. Symptoms of severe allergy include; wheeze or difficulty breathing, swelling of the face, throat or tongue, rash or itching, stomach cramps and vomiting, or feeling very unwell. Call for immediate help if necessary
- Bleeding or bruising. This is more likely if you are taking certain medications for example aspirin, warfarin or other antiplatelet drugs and usually settles with simple pressure. If you experience severe swelling or bruising after the injection seek urgent medical attention.

- Facial flushing (warmth and redness) may occur. This will usually resolve after 24-72 hours and predominantly affects women. It is not an allergy and does not preclude future injections.
- Thinning of the skin and soft tissues at the site of the injection may occur resulting in a dimple. Occasionally the formation of a small lump or loss of a small area of skin colour may also occur.
- Tendons may weaken when in contact with steroid resulting in rupture. This effect is thought to be very rare and may primarily affect damaged tendons already predisposed to rupture. Seek prompt medical attention if you experience new weakness in the affected body part.
- The steroid may occasionally cause irregular vaginal bleeding for a few weeks. Joint and soft tissue steroid injections can cause a rise in blood sugar for a few days in diabetic patients. The effect however is usually negligible and would not normally necessitate a change in treatment. In certain circumstances additional monitoring may be recommended.

What does the procedure involve?

Depending upon the site of the injection, your doctor will disinfect the skin at the injection site and will numb the area using a small amount of local anaesthetic before administering the corticosteroid injection. The doctor will go over the procedure in more detail beforehand and give you plenty of opportunity to ask more questions and make sure you fully understand things

FOR MORE DETAILED QUESTIONS AND ANSWERS SEE BELOW FREQUENT QUESTIONS AND ANSWERS

Q1: What are corticosteroids?

A1: Corticosteroids are a class of medications related to cortisone, a naturally occurring hormone produced by your adrenal glands.

(These are NOT the same as Anabolic steroids which are banned substances in elite sport.)

Q2: Where and how are steroids injected?

A2: Either directly into the joints (intra-articular), tendon sheath (peri-tendinous) or around the joints (peri-articular). For accuracy, ultrasound is often used to guide the needle to the intended area. This is commonly known as an 'ultrasound-guided steroid injection' (USGI). Some injections can also be delivered easily without the use of ultrasound guidance.

Q3: How do steroid injections work?

A3: After injecting it into the intended area, corticosteroids work to reduce inflammation (heat, redness, swelling, & pain) in and around the joint.

You should eventually feel less pain, swelling, stiffness and warmth and be able to function a little easier. It is important to realise that corticosteroid injections are NOT cures but by lessening the troublesome symptoms, provide a valuable 'window of opportunity' to do rehabilitation (e.g. physiotherapy) and put in place strategies to prevent recurrence of the injury.

Q4: Why are steroids injected locally?

A4: The goal is to deliver the medication directly to where it is needed and reduce inflammation in or around a single joint.

Q5: What types of steroids are available for injection?

A5: There are a few different varieties of steroids available for injection (e.g. Depomedrone/ Kenalog/ Hydrocortisone).

There is little evidence to suggest that one type of steroid is significantly better than another. Most doctors use the type of steroid medication they are familiar with.

Q6: What conditions benefit from steroid injections?

A6: Localised steroid injections are useful for different types of arthritis and conditions such as bursitis, synovitis and tendon nodules.

Q7: Who should NOT receive these injections?

A7: Contraindications include patients who have either had a previous allergic reaction to a corticosteroid/ local anaesthetic or those with an infection in or around the joint.

Q8: How are these injections given?

A8: A steroid injection into or around a joint or tendon sheath is much like an injection into the arm. Local anesthetic is often given before the injection or mixed directly with the steroid and injected into the joint to give immediate pain relief. *It is important to have something substantial to eat and drink an hour or so BEFORE having these injections- this is to minimise the likelihood of feeling 'lightheaded' or fainting after an injection. *

Q9: Does the injection hurt?

A9: In the hands of an experienced doctor, the injections are relatively comfortable and similar in sensation to a routine blood test or injection into the muscle in the arm.

Q10: What should I feel after an injection?

A10: If local anesthetic was injected with the steroid, your pain may be improved in the few hours after the injection.

The local anaesthetic will only last for a few hours so your pain is likely to return once it wears off.

It is normal to feel a transient increase in discomfort in the joint that should resolve within 24 hours. You can treat this discomfort by applying a cold pack such as a gel pack, bag of frozen vegetables, or crushed ice in a bag for up to 20 minutes at a time or by using medications such as Ibuprofen or Paracetamol.

Q11: How long does it take for the injection to work and how long will it last?

A11: Most corticosteroid injections typically take 1-2 weeks to take full effect.

The duration of improvement varies- Some patients report months of relief (or longer) whereas others find only a few days

Q12: If the 1st injection doesn't work, can I try a 2nd injection?

A12: Generally most patients, if they are going to respond, will have some response after the first injection.

Patients who have gained no symptom relief or functional benefit from 2 injections should probably not continue with repeat injections, as the likelihood of improvement is small.

Q13: How often can I have repeat injections?

A13: There is research to suggest that too many injections may weaken tendons, ligaments, and accelerate the loss of cartilage.

In contrast, other scientific studies have found that injections can slow joint damage and help preserve the joint. As a general rule, a reasonable approach is to limit it to a maximum of 3 injections per year for each affected joint.

Q14: What should I do after an injection?

A14: If possible, it is best to rest the joint completely for 2 days ('Complete Rest'), and then avoid very strenuous activity on the joint such as heavy lifting for up to 2 weeks ('Relative rest').

Scientific studies have shown this may improve the effect of the injection. It is advisable to stay around for 10-20 minutes after the injection to ensure there are no immediate side-effects (see below). This is a precautionary measure.

Q15: What are the possible side-effects of an injection?

A15: Most joint injections result in minor or no side-effects.

Side-effects that rarely occur include:

- ☐ Injury to the joint, ligament or tendon,
- ☐ Loss of the fat layer below the skin (lipoatrophy),
- ☐ Lightening or darkening to skin locally (hypopigmentation or hyperpigmentation)
- ☐ Calcification around the joint,
- ☐ Allergic reaction to the constituents in the injection,
- ☐ Transient vaginal spotting or bleeding in females,
- ☐ Joint Infection

The joint may 'flare-up' transiently after an injection.

Systemic effects may occur due to absorption of some of the steroid from the joint. Some people may experience a vasovagal episode after an injection and feel faint.

Q16: When should I call my doctor or seek medical attention?

A16: If the injected joint becomes very painful, red, or swollen, seek medical attention immediately as the joint may be infected.

As previously explained, one of the very rare (1 in 5,000-10,000) risks of a joint injection is infection. However, the most common cause of these symptoms is a reaction to the injected steroid ("steroid flare") that occurs in 2% to 5% of patients.

This usually begins 6-12 hours after the injection and may last for 2-3 days.

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