Local steroid injections can give rapid and effective reduction in pain and inflammation; however, improvements are usually temporary. As with all medicines, some people may experience side effects. The aim of this patient information leaflet is to provide you with the information that you need to know.

What are steroids and how are steroid injection used?
Some steroids occur naturally in the human body and man-made steroids act like natural steroids to reduce inflammation. They are not the same as steroids used by bodybuilders to increase muscle size and strength. They can be taken as tablets or as an injection.

Steroids are often recommended for people with inflammatory conditions and musculoskeletal pain, such as inflammatory arthritis. They can also be used in osteoarthritis and a range of other soft tissue conditions which involved pain and/or inflammation.

A range of different steroids exist, some are shorter acting which work almost immediately but they only give short lived relief maybe a week or so. Longer acting steroids take around a week to work but can last for several months.

What happens when I have a local steroid injection?
The clinician who will be performing your injection will choose the most appropriate steroid medicines and dose for your condition and symptoms. They will usually inject the steroid directly into the area that is inflamed, such into the joint or around the soft tissue, where the pain is felt. Most injections are quick and easy to perform.

Normally an ultrasound scan is used to find out more about where the inflammation is and also to deliver the injection more precisely. For safety reasons your clinician may delay your injection if you have unstable blood pressure or unstable blood sugars due to diabetes to get consent from your GP.

What happens after the injection?
If you have local anaesthetic, your pain will be relieved within minutes but may wear off after an hour or two. It usually takes several days for the effect of the steroid to fully begin to work.

You may wish to arrange alternative transport home after your injection, especially if you are having local anaesthetic which can cause some numbness and make it difficult to drive.

If you have any injection into the joint you should try to avoid strenuous exercise for two days afterwards. If you are having an injection around a tendon, you may be asked to avoid heavy impact and loading activities for two or three weeks.

Will I need another injection?
If you find the injection helpful, and other treatments unsuitable, the injection may be repeated. However, injections are most often used to provide a window of opportunity to engage in exercise...
and rehabilitation or whilst finding a more suitable program of treatment. Once your pain is better controlled, the need for injection should be reduced.

Possible risks and side effects
Most people have steroid injections without any side effects.

The risk of side effects is greater with stronger doses and longer acting steroids, such as Triamcinolone acetonide and Methoprednisolone, as they tend to be stronger and dissolve less easily in your body. However these steroids are often preferred as they offer longer treatment affects.

Will it hurt?
They can be a bit uncomfortable at the time of injection, but many people find that they are not as bad as feared.

Flare up of pain
Occasionally people may notice a flare up of their pain within the first 24-hours after injection. This usually settles itself within a couple of days. Simple painkillers, such as Paracetamol, may help.

Skin changes
Injections can occasionally cause some thinning and changes in the colour of the skin at the injection site. In rare cases a steroid injection into muscles or joints can cause an indentation in the skin around the area.

Infection
Very rarely, you may get an infection in the joint at the time of injection. If the joint becomes more painful and hot, you should seek medical attention immediately, especially if you are also feeling generally unwell.

Weight gain
People are often concerned around the possibility of steroid related side effects, such as weight gain. One of the advantages of steroids, compared with tablets, is that the dose can be kept low. This means the chances of these more systemic side effects are very rare.

Diabetes
People with diabetes may experience a fluctuation in their blood sugars. This should always be discussed with your GP and the therapist providing the injection, before the injection takes place. It is important that you be vigilant of your blood sugars for around a week to two weeks after the injection. If you are worried, you should speak to your doctor.

Other possible side effects
Other possible side effects include facial flushing, temporary changes in menstruation and mood.

Can I take other medicines along with the steroid injection?
You can take other medicines with local steroid injections, however, treatment for certain conditions such as diabetes, cancer or HIV may require your therapist to first check with your GP or treating consultant. For example, if you are taking a blood thinning drug (also called anti-coagulants) such as Warfarin, you may need a blood test to make sure that your blood is not too thin to have the injection. This is because of the risk of bleeding into the joint.

You therefore must tell the physiotherapist giving the injection if you take anti-coagulants as they may need to discuss this with your GP before giving you the injection.

Pregnancy and breastfeeding
Unfortunately, we are not able to offer steroid injections to patients who are pregnant. If you are currently breastfeeding, please ask your therapist for a leaflet produced by Breast Feeding Network in 2014, which has been produced to give you guidance in this area.
Below is a summary of risks or side effects from having injections

Potential side effects of steroid injections

Serious side effects are rare and include:
- Joint and soft tissue infections (Advise on symptoms of septic arthritis and to seek medical advice if they occur)
- Anaphylaxis

Other potential side effects include
- Risk of tendon rupture
- Local subcutaneous fat atrophy (usually temporary and disappears within a few months)
- Local depigmentation (usually temporary and disappears within a few months)
- Post injection flare of pain at injection site.
- Destabilisation of blood sugars in diabetic patients which require vigilant monitoring by patient following injection
- Blurring of vision or sudden loss of visual acuity due to very rare complication of central serous chorioretinopathy
- Facial flushing
- Menstrual irregularities
- Dizziness
- Injury or trauma to neurovascular structures during the injection procedure
- Very rarely significant joint destruction or damage can occur although usually associated with overly frequent high dose injections

You will be asked to remain in the clinic for 20 minutes following the injection to allow observation of possible adverse reactions.

Potential side effects of local anaesthetics

Serious side effects are rare and include:
- Infection - Infection in soft tissue or joint injected (Advise regarding symptoms of septic arthritis and to seek medical attention)
- Anaphylaxis

Other potential side effects include:
- Light headedness
- Numbness of area injected
- Dizziness, drowsiness
- Blurred or double vision
- Vomiting
- Bradycardia
- Hypotension cardiac arrest
- Very rarely loss of consciousness, respiratory depression, respiratory or cardiac arrest.
- Allergic or anaphylactic reaction
- Injury or trauma to neurovascular structures during the injection procedure

Your therapist is trained to, and will take every appropriate step to avoid injecting or traumatising soft tissue structures, nerves or vessels when performing the injection. However, there is a very small risk that this can occur, particularly with injections at certain locations.

This leaflet’s content is adapted from Arthritis Research UK’s ‘Local Steroid Injections’ leaflet and has been used with their kind permission. (www.arthritisresearchuk.org)