What is a Joint Injection?
A common cause of a painful joint is synovitis (inflammation of the lining of the joint). It can be useful to inject corticosteroid and/or local anaesthetic medication directly into the joint or the soft tissue next to a joint (this is often called a bursa) to reduce the inflammation and provide pain relief. Reduction in pain may make physical therapy more effective.

This procedure is most often used in the shoulder, knee, or hip but may also be helpful in other joints.

To make sure the injection goes into the joint itself where it has a better chance of working, the needle for the injection is guided by imaging, most often by an ultrasound.

Sometimes it can be difficult for your doctor to know exactly what is causing your joint pain. If the pain is not due mainly to joint inflammation, the injection may not improve your symptoms. Although this may be disappointing to you, it can be helpful information for your doctor as it means that another cause of the joint pain needs to be considered.

How do I prepare for a Joint Injection?
PRIOR TO YOUR APPOINTMENT DAY:
You do not need to do anything special before a joint injection. You may eat and drink as normal.

ON THE DAY OF YOUR APPOINTMENT:
Please bring any previous X-rays, ultrasound, CT or MRI scans taken as part of your joint pain history.
Please tell the radiologist if you are allergic to any medications.
It may be best to wear comfortable clothing with easy access to the joint being injected.

What happens during a Joint Injection?
The Joint Injection is most commonly performed using ultrasound to guide the injection. The exact technique varies depending on the joint to be injected and the radiologist (specialist doctor) who performs the injection.

Generally a preliminary scan will be performed to locate the exact point to be injected, which may be marked on your skin. The skin will then be cleaned with an antiseptic solution to prevent infection.

A needle will then be placed into the joint either at the point marked on your skin or using the ultrasound to see the tip of the needle as it moves into the joint or bursa.

Sometimes the radiologist may remove some fluid from the joint for analysis before injecting usually a mix of steroid and/or local anaesthetic into the joint or bursa.

Are there any after effects of a Joint Injection?
You may experience more soreness in the joint after the injection but may also feel better initially as a result of the local anaesthetic. The anaesthetic will generally wear off after a few hours and you may have more soreness in the joint than before the injection. This soreness may last for 2-3 days after the injection.

If the steroid part of the injection is going to reduce the pain and inflammation in the joint, this will usually start to occur between 3-5 days after the injection.

If the pain becomes much worse in the days following the injection, this may indicate either an aggravation of the synovitis by the injection or very rarely an infection of the joint. If this occurs you should contact your referring doctor or the emergency department of a hospital as soon as possible.

How long does a Joint Injection take?
This may vary but an ultrasound guided injection will generally take between 15 and 30 minutes.

What are the risks of a Joint Injection?
This is a very safe procedure with few risks. There is a risk of infection, which is very small and probably lies between 1 in 20,000 and 1 in 75,000 injections performed. The procedure should not be performed if there is broken skin or infection overlying the joint, or if the joint may already be infected.

There are possible complications of the steroid injection, which include aggravation of the pain due to irritation of the joint lining by crystals in the steroid solution.

If the steroid is not injected solely into the joint, there is a risk of damage to the soft tissues at the injection site, including atrophy (a weakening) of the skin or subcutaneous fat (found just beneath the skin) and rupture of the tendons around the joint.

Some patients find that the injection gives them good pain relief for a few months, but then the pain comes back and they wonder about having another injection. Although the exact risk of multiple injections is not known, most doctors would advise
against injection more than 3-4 times a year to avoid damage to the joint.

Occasionally people are allergic to the injected medication (as with any drug). The exact risk of this is not known but it seems to be very uncommon. You should advise your doctor and the radiologist performing the Joint Injection of any allergies you may have.

An ultrasound guided injection does not use X-ray contrast medium, but this may be used if the injection is done using fluoroscopy (X-rays) or CT if this is a preference of the radiologist.

What are the benefits of a Joint Injection?

Joint Injections are performed to confirm the injected joint or bursa as the site of pain and to reduce the synovial inflammation to reduce the pain and enable you to have physical therapy.

Overall, steroid injections into joints (particularly the shoulder and the knee) appear to provide short to medium term pain relief (3 weeks to 3 months), particularly when combined (in the shoulder) with appropriate physical therapy.

They do not provide long term pain relief and do not alter the course of underlying joint disease (e.g. osteoarthritis).

Who does the Joint Injection?

The Joint Injection is performed by a radiologist (specialist doctor) who uses an ultrasound machine, or less commonly fluoroscopy or a CT scan, to guide the needle into the joint.

The radiologist will provide a written report to your doctor about the procedure.

Where is a Joint Injection done?

Usually in either a public or private hospital or a private radiology practice.