

Injections in the rheumatology clinic

A number of musculoskeletal problems can be treated by injection. This leaflet sets out some of the indications, types of injections available and possible side-effects.



Aspiration of a knee joint

1. Corticosteroid injections

These are also known popularly as steroid or cortisone injections. They are often used for arthritis in joints (both inflammatory, like rheumatoid arthritis, or non-inflammatory, such as osteoarthritis) or for acute inflammations such as frozen shoulder. They are also used for soft tissue injections such as carpal tunnel syndrome and tennis elbow.

If a joint is swollen your doctor or nurse will try to suck out the fluid present. An inflamed joint often produces a lot of fluid; removing the excess makes the joint much more comfortable, and makes the steroid injection work better.

The type of steroid used may depend on the site injected. Hydrocortisone is often used for soft tissues, while a more potent steroid such as triamcinolone or methylprednisolone is normally reserved for joints (this is because the side-effects of these when injected into soft tissues can be troublesome).

For some injections some local anaesthetic may be used with the steroid. This not so much to reduce the pain of the injection itself (after all, the anaesthetic needle will hurt!) but more so that the doctor can judge whether the injection is correctly placed. Often, though not always, the anaesthetic allows assessment of pain relief within a few minutes, rather as when you have an anaesthetic injection at the dentist it makes the area go numb. However, once the anaesthetic has worn off the injected part may be much more painful for a few hours.

The effect of a steroid injection cannot be fully judged for four to six weeks, although it may work more quickly. If an injection works but the problem recurs, your doctor may offer you another injection but may suggest other alternatives. These include physiotherapy, further investigations or surgical referral.

Joint injections include:

- Knee
- Shoulder
- Ankle
- Wrist
- Small joint of hands and feet (especially the base of the thumb and great toe)
- Elbow



Injection of the elbow joint

Soft tissue injections include:

- Tennis and golfer's elbow
- Carpal tunnel injection (wrist)
- Heel
- Ligaments around knee and ankle
- Muscle attachment or bursa on outer aspect of hip
- Muscle "tender spot" (often shoulder or back)



Injection of the heel (plantar fasciitis)

Some patients with a flare of joint inflammation may be offered an intramuscular injection. For this methylprednisolone (Depo-Medrone) is used and may produce a response of up to 8 weeks. However the benefit becomes less noticeable with repeated injections, so they will only be offered occasionally.

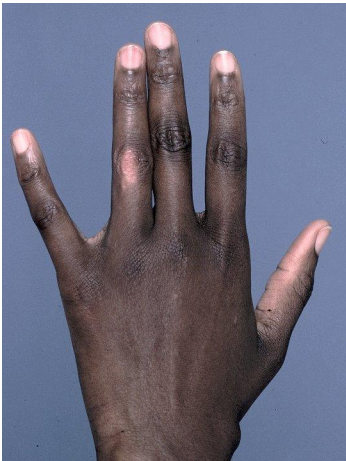
Side-effects

Some patients, as noted above, may experience a transient increase of pain in the first 24 hours following an injection.

Occasionally patients have an acute crystal reaction, with an increase of pain, and swelling, of considerable severity. The more potent steroids used are a suspension of crystals and can provoke a gout-like reaction, which is alarming. It will usually settle within 48 hours and this response may be speeded up by the taking of an anti-inflammatory drug such as ibuprofen. If the reaction does not go down, consult your doctor at once or ring the rheumatology helpline. It is often feared that an injection reaction such as this is due to infection. However the risk of this is vanishingly small – perhaps 1 in every 500,000 injections.

Very rarely patients have an acute allergic type reaction. This usually produces a profound feeling of faintness and occasionally nausea about 6-8 hours after administration. It is not clear whether this reaction is due to the steroid or the local anaesthetic.

If potent steroid such as triamcinolone or methylprednisolone leaks into the skin it can cause a loss of pigmentation and some destruction of the fat under the skin. These appear a pale patch (particularly in darker-skinned people) and a dimple. Though unsightly it is harmless and the pigment loss may recover.



Depigmentation following steroid injection of the ring finger



Fat atrophy after golfer's elbow injection

There do not appear to be any long-term adverse effects from steroid injection, and indeed there is some evidence that repeated injections likewise do no harm to the joint injected, or generally. This is because the body clears the steroid away quite rapidly. However if several joints are injected at once the steroid dose may be enough to produce an overall feeling of wellbeing, or in the case of rheumatoid arthritis and similar conditions it may provoke a remission. This will only be temporary.

After a joint injection you should rest the injected joint as far as possible for at least 24 hours

2. Viscosupplementation injections

This type of injection is sometimes useful in worn joints, usually the knees, though it can be helpful in shoulder and elbow. The injection is a preparation of hyaluronic acid, which is a natural lubricating substance found in joints. You may be offered a single injection (Durolane) or three injections at weekly intervals (Synvisc, Orthovisc). They do not work well if the joint has a lot of fluid in it, or if it is deformed.

These injections very occasionally provoke an allergic reaction, with the joint being worse for 2-3 days. If they work, they may relieve symptoms for 4-6 months and can be repeated at intervals. They are particularly useful for patients who do not want, or are not fit for, surgery.

3. Local anaesthetic injections

Some nerve block injections are offered in the rheumatology clinic – in particular the suprascapular nerve block, which may relieve pain in the arthritic shoulder joint. There are no common side-effects of such injections; however, if you know that you are allergic to local anaesthetics you must tell the doctor, as it could be risky to proceed.

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