

## **Cortisone Injection**

Injectable corticosteroid or “steroid injections” commonly called “cortisone,” have been used by orthopaedic professionals since the early 1950s for a variety of painful conditions including tendinitis and arthritis. Cortisone is naturally produced in the body by the adrenal gland and released when the body is under stress. Injectable cortisone is synthetically produced and is similar to the body’s own product. They reduce inflammation and thereby reduce pain enabling return to pain free activities. Cortisone injections are completely legal and different from the illegal anabolic steroids used to increase athletic strength and speed.

### **How does Cortisone work ?**

Cortisone is not a pain-relieving medication , however, it reduces the inflammation in and around the area of the injection, reducing pain and thereby improving the movement of the joint. By injecting the medicine directly into the inflamed area, such as a wrist, elbow or shoulder joint, high concentrations of cortisone can be administered with minimal side effects. A long acting local anaesthetic is either injected prior to injecting the steroid or both the local anaesthetic and steroid are injected mixed together. There is usually immediate pain relief from the injection. The pain returns when the local anaesthetic wears off usually after about 8-14 hours. The steroid should start to work around 3-4 days.

Immediately after the injection it is worth taking some anti-inflammatory tablets such as Ibuprofen for 2 days after food. In addition, using ice around the area of the injection reduces the pain. Discomfort usually improves within a few days and lasts for several weeks or permanently.

If cortisone injections are used, they must be combined with the appropriate rest period and rehabilitation to gain the best results. Medical professionals are often hesitant to use these injections routinely for injury treatment as they may turn off the body’s “alarm system,” ultimately leading to a more significant injury later on.

## Contra-indications

There are very few contraindications in the use of cortisone injections.

- \_ Infection of a joint (septic arthritis)
- \_ Skin infection at the site of the injection
- \_ Allergic reaction to previous cortisone injections
- \_ Drugs such as Warfarin

Finally, athletes should not receive cortisone injections into a joint or bursa immediately before competition, as the athletic activity may cause injury/ damage to the surface resulting in pain, swelling, and stiffness.

## Side Effects

As with nearly any procedure where medications are injected into the body adverse reactions may occur. The so called “cortisone flare” reaction has been reported to occur in approximately two percent of patients. This occurs when the injected cortisone crystallizes and causes pain worse than before the shot. Fortunately, these “flares” usually do not last long and resolve with icing after 12 to 48 hours.

Whitening of the skin around the injection site is also a common side effect in dark-skinned individuals. This discoloration is not harmful, and can be irreversible.

Additional side effects include softening of cartilage and weakening of tendons at the injection site. This usually occurs in patients who receive several steroid injections. Most surgeons currently recommend having injections at least three months apart and avoiding repeat injections within a short-time period.

Diabetic patients may experience a temporary, but significant, elevation in blood sugar due to absorption of the cortisone into the bloodstream. Diabetic patients should therefore carefully monitor blood sugar levels for 24 to 48 hours following an injection.

Although rare, infection at the injection site is another side effect. This can be avoided with proper skin sterilization using alcohol.

The fat under the skin can thin out producing a dimple under the skin producing some cosmetic changes.