

Cortisone Information

What is Cortisone?

Cortisone is a hormone created in the adrenal glands, which are just above each kidney. The levels of secreted cortisone increase in stress situations, such as: fight or flight, illness, fracture. Cortisone has many positive effects in the body, including reducing inflammation, shrinking certain tissues, and speeding up certain healing effects. Sometimes, it is helpful to bring these effects to specific locations in the body, to strengthen and localize the positive effects. To accomplish this, the cortisone is modified so it persists in certain tissues and becomes longer-lasting. It is then injected directly into the area that needs it most, thus limiting how much spreads to the rest of the body.

What conditions benefit from cortisone, and when can I expect improvement?

The most common locations for these injections are in arthritic joints like the knee when they are sore and irritated, into bursae which are sacs under the skin like at the shoulder which become inflamed and painful, and around some tendons when the sheath of the tendon is inflamed. Because cortisone is such a powerful hormone, it is used with care and judgement. Exercise is the primary treatment of arthritis, so if the joint is swollen and painful, an injection of cortisone can settle it down long enough to restart the exercise. Cortisone is powerful in settling down bursitis, which is not a degenerative condition, so it responds well and for much longer periods to a cortisone shot. An example of this is in the shoulder.

The effect is rapid, and improvement should be noticed within a few days, but rarely it can take a week or two to have an effect, and in very few people, there is no noticeable effect.

What will happen during the injection?

Cortisone is often used with a local anesthetic, either in two injections: freezing followed by cortisone, or as a mixture of the freezing and cortisone in the same syringe. The skin is sterilized over the site of injection, the needle is introduced into the space needed, and the solution is injected. The syringe is removed and a band aid placed over the site in case there is some spotting. Keep the injection site dry for a few hours afterwards. Sometimes, ultrasound is used to better locate the place in which to put the cortisone, and the process takes a bit longer as the ultrasound probe has to be covered with sterile plastic, sterile ultrasound gel is applied to the skin (also sterilized), then the site of injection is localized on the ultrasound screen.

What are the risks of cortisone injection?

Because of the power of cortisone, there are some effects we are cautious about. It is not used in major tendons, like the Achilles tendon at the heel, because of a small risk of rupture of the tendon. As with any injection, there is a small risk of infection; so we prefer not to use it in bursitis which has a high risk of infection, like the bursae in front of the knee or elbow, or in a joint which is going to be replaced. If the injection site has any hint of infection, or has foreign material, such as in knee replacements, the cortisone will not be injected. In the unlikely event that redness, heat, swelling or fever occurs after an injection, you should seek medical care.

There are some rare side effects that are not dangerous, but you should be aware of. The injection can be more sore for a few days to a week afterwards - a flare reaction. Another rare occurrence is a flush reaction, particularly in the face, lasting a few days. If you are diabetic, you should pay attention to your blood sugars for a day or two afterwards. Cortisone can cause fat cells to waste away, which may cause a dimple to appear over the area of the injection. Since cortisone shrinks tissue, there may be some thinning of the skin over the injection site, along with lightening of the skin, which usually resolves within the year.

What is the cost of a cortisone injection?

The cortisone and freezing we use is packaged in single dose vials as to maintain the purity and sterility of the injection material, but it does increase the price. Cortisone, or a mixture of freezing and cortisone, costs \$40, which covers materials used in the injection. If the ultrasound machine is used, the charge is \$50 as extra materials are used.

Third party insurance coverage may provide reimbursement. Please check with your individual plan provider.

What else should I think about?

A typical situation to use cortisone is when arthritis flares in the knee. It is important to get back to exercise, so the cortisone is injected to reduce swelling and pain. Cortisone is not a cure for arthritis, exercise is important to manage the degeneration. In this situation, the likelihood of accurately getting the cortisone into the knee joints is at least 93%. At least 80% of patients get a good response, and the effects of the shot may last for two weeks to months. Be sure you understand the exercise program that goes with the injection.