Steroid Injections

What is a steroid injection?

Corticosteroids are the strongest available anti-inflammatory medications. Weaker anti-inflammatory pills such as ibuprofen, Advil, naproxen, and Aleve, are some of the most commonly utilized medications in the United States. Corticosteroids are available as pills. These pills generally must be taken every day or several times a day. Taken as pills these medications reach the entire body and have numerous side effects. Corticosteroids are also available as injections. Providing the medication as an injection can reduce side effects because more of the medication is directed to the problem area. In injection form, the corticosteroid is formulated to dissolve slowly over weeks for a more sustained effect.

Why use an anti-inflammatory?

Shoulder pain is commonly caused by inflammation within the shoulder joint and surrounding tissues. Inflammation is part of the healing response and is associated with swelling and pain. In the setting of an acute traumatic injury that the body can successfully heal, such as a small skin cut or a cracked bone, inflammation brings growth factors and cells important for healing to the site of the injury to begin repairing damaged cells. In the setting of a degenerative process that the body cannot successfully heal, such as shoulder arthritis or rotator cuff fraying, this process causes pain and further decreases shoulder function. As of many these degenerative processes progress and worsen, the inflammatory response will continue without leading to healing. Anti-inflammatory medications can reduce this inflammation and the negative side effects associated with it.

What are the risks of steroid injections?

Steroid injections are safe, but do have risks. Because steroids shut down the natural healing response, they can have negative effects. These include atrophy of the tissues, damage to the tendons, degradation of the cartilage, and weakening of the bone. These problems almost **never** occur with a single injection. However, negative effects can occur when many, many repeat injections are given or when injections are given too frequently. Generally, Dr. Chalmers recommends that injections never be given more frequently than once every three months. If a surgery is planned, Dr. Chalmers usually recommends that injections not be given within three months prior to surgery as residual steroids can reduce healing and increase the chance for infection. If you have received over two injections in the same location, it may be worth considering whether repeat injections are a better long-term treatment course compared to the alternatives.

Types of Injections

Dr. Chalmers recommends that these injections are as targeted as possible to the specific problem area. Targeting the injection is useful because targeted injections can confirm that the problem is in that specific area allowing for a more specific diagnosis. Targeted injections are more effective for treating the specific problem area. Because targeted injections are limited to a specific area the side effects of the corticosteroid on the entire body is reduced. Thus, Dr. Chalmers will often recommend that injections be given under x-ray or ultrasound guidance by one of his partners who is an expert in guided, targeted injections. However, bursal injections can reliably be given without ultrasound or x-ray guidance and Dr. Chalmers will perform these injections.

Post-Injection Instructions

- Monitor your shoulder pain closely after the injection. Take note both of pain relief the day of the injection as well as in the days to weeks following the injection. Many patients find it helpful to keep a "journal" of their symptoms surrounding the injection.
- After an injection, the shoulder will initially feel numb because of the local anesthetic.
- Once this numbing medication wears off in 12-18 hours, the shoulder may feel sore and swollen. Often, the shoulder feels worse during this period than it did prior to the injection. This is normal and does not necessarily mean that the injection will not help or that it was given in the wrong location.
- Anti-inflammatory medications such as ibuprofen can be very helpful the evening of the injection while the shoulder is sore and swollen. Ice can also be very helpful during this period. Once the fluid from the injection is absorbed, soreness and swelling will resolve.
- The steroid takes 3-7 days to take effect. It can take up to two weeks to achieve the full effect. If your shoulder does not feel different the day after the injection, please be patient.
- The steroid is in a crystalline, sustained-release, long-acting form that continues to release for six weeks after the injection. However, many patients experience continued pain relief for much longer because once the inflammation has been halted it may not return.
- While there are no restrictions, use caution with heavy activity the day of the injection.
- We do not recommend injections more than every 3 months or within 3 months of surgery.
- Although the injection is performed under sterile conditions, it is always possible for an infection to occur with an infection. This occurs very rarely (1/40,000). Please contact the office if you develop significant pain, swelling, redness, fevers, motion loss, or any other signs of infection.
- If you have diabetes, monitor your blood sugar levels closely after the injection. The steroids within the injection can lead to elevated sugar levels.