David M. Klein, MD – Kennedy-White Orthopaedic Center

THE MEDICINE:

Cortisone is one type of steroid, known as a **corticosteroid**. These compounds have powerful anti-inflammatory properties. There are many different medicines with different names, and they can be injected into joints or localized areas of inflammation to decrease pain and swelling.

Steroids can also be given by mouth. Because oral steroids can cause numerous side effects, they are reserved for selected and specific conditions. The risk of side effects is much lower with injected steroids than with oral steroids.

Note that cortisone and other corticosteroids used to treat inflammation *are not* the same as the steroids that are sometimes abused by athletes.

INDICATIONS:

Steroid injections are used to ease the pain and swelling associated with the inflammation of tendinitis, bursitis, arthritis, gout or any number of other inflammatory conditions. They are commonly used at the knee, shoulder, hip, elbow, wrist, and fingers. The injections will be more effective if the steroid can be placed into the precise area of inflammation. They are not as effective if the pain and inflammation is in a large or broad area.

By using an injection, your doctor can deliver a concentrated amount of medication into the area where you need it most.

BEFORE THE INJECTION:

Before a steroid injection, you should tell your doctor if you have had a recent skin or general infection. This includes severe infections such as tuberculosis (TB), but you should also mention minor infections such as colds. Make sure you have given your doctor a list of the medicines you are currently taking before the injection. This includes nonprescription and over-the-counter medications, especially aspirin, NSAIDs (ibuprofen, naprosyn, Motrin, Advil, Aleve, etc.) or other "blood thinning" medications. You should also state whether you might be pregnant. Your doctor should also know if you have ever had a bad reaction to steroids or other medications especially local anesthetics such as lidocaine or novocaine. You should also be prepared to list all of your allergies, especially those to medications.

COMPLICATIONS AND LIMITATIONS

Steroid injections are considered very safe. The major drawback is that they may not produce the desired relief and many patients actually hurt worse for a day or two after the injection. Rarely, they may cause infections, allergic reactions, or bleeding in the area of the injection.

Some people develop a blanched area of skin at the site of the injection. This is perhaps the most common side effect of the medicine. The skin pigment is lost, and the layer of fat under the skin may thin out. In some people, the cortisone may even weaken the skin, making it more susceptible to bruising and injury. This effect may be temporary or permanent. If you are *DIABETIC*, expect your blood glucose readings to be higher than normal for up to a week. You may have to alter your medicines to compensate. If this happens, ask your internist or endocrinologist.

Frequent injections into the same joint or region may cause a weakening of the bone, tendons, ligaments and other tissues. Repeated injections tend to be less effective at relieving the inflammation than the first ones. In other words, the third or fourth injection sometimes provides less relief and relief for a shorter period of time than the first injection. For these reasons, many doctors do not like to do more than three or four injections into the same area.

THE INJECTION:

The injection itself is completed while you are seated or lying down. You will likely be asked to hold the body part in such a way to make the injection easier for the doctor. The area will be cleaned with an antiseptic solution. The "cortisone" (often combined with a local anesthetic) is then injected directly.

AFTER THE INJECTION:

You may usually be asked to limit your activity for several days after the injection. It is common for the pain to actually be worse for a day or two after the injection. Treat this pain with **ice** or **cold packs** (15-20 minutes at a time, for a few times each day). **Do not use heat for the first 48 hours** after the injection.

Make sure to call your doctor if you have severe pain, a fever, or any significant swelling or redness around the area of injection. While many people experience relief within 2-4 days, the maximal effect may take up to four weeks.

HOW LONG WILL IT LAST?

The active part of the medicine itself is gone is just a few days. Pain relief from a steroid injection, however, is variable. In some people, the effects may be short-lived, lasting only weeks to months. In others, the injection may effectively "break the cycle", and the pain may be gone permanently.