

Corticosteroid Injections

by Dr. Trevor L. Hall, MD, CCFP(SEM), Dip. SEM

Using a needle to inject medication into a knee or other joint has been used for many years for treating osteoarthritis (OA). Injections can play an important role in managing OA symptoms.

Corticosteroid Injections:

This type of injection (more commonly known as a “cortisone” injection) has been used for treating OA for decades. A corticosteroid injection works mainly by decreasing inflammation. So, this type of injection is very helpful in situations when the arthritic joint is very painful and swollen due to inflammation. The effect of cortisone tends to be relatively quick, usually starting to work within a week.

However, there are a few negatives about corticosteroid injections that need to be considered. These injections do not always work well, and often do not have any effect at all (especially in situations in which there is no inflammation in the joint). When they do work, they tend to have an effect that lasts over the short term, typically for 4 to 8 weeks, and are not viewed as a long-term solution for OA.

In addition, cortisone may have a number of side-effects. Besides the complications that are risks for all injections (see reverse), cortisone may have other side effects. These may include temporary elevation in blood pressure for those with hypertension, temporary elevation in blood sugar for those with diabetes, allergic reaction, “steroid flare” (temporary increase in pain), skin reactions or atrophy and very rarely can affect the blood supply to bone.

One of the most concerning issues that had surfaced in the past few years is the possibility that repeated

corticosteroid injections may actually be “chondrotoxic”. This means that cortisone injections within the joint can actually cause breakdown and degeneration of articular (surface) cartilage. Because osteoarthritis is a disease that results in degeneration of articular cartilage, repeated corticosteroid injections are now viewed as probably causing OA to become worse over time if done repeatedly. In addition, cortisone can also affect the strength of other tissue such as tendons when injected directly into these other tissues (e.g., can contribute to tendon ruptures).

Summary:

Although corticosteroid injections may have possible complications and side effects, especially with repeated injections, they remain a viable treatment option for OA in some situations. Corticosteroid injections are most useful in cases where the osteoarthritic joint is inflamed, painful and swollen and when repeated injections are not done.



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Possible Side Effects with All Injections

Injections that are performed by a properly trained physician tend to be a relatively safe procedure. However, there are possible side effects that are possible with any type of injection. These include the following:

- Local pain or discomfort during or after the injection (e.g., needle discomfort, temporary tightness or fullness after the injection).
- Skin bruising, bleeding or discoloration
- Local tissue irritation and/or swelling
- Allergy to the local analgesic (“freezing”) agent (topical xylocaine)
- Suffering a “vasovagal reaction” (fainting or feeling weak/faint/dizzy)
- Infection (risk is estimated statistically to be between 1:10,000 to 1:50,000)
- Needle break
- Nerve injury
- Blood vessel injury
- Lack of improvement
- Worsened pain or function

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