Patients Often Say “I Hate Shots”!

By Thomas J. Haverbush, M.D.
Orthopaedic Surgeon

Transforming patient information into patient understanding.

The sentence you read just above was never more true in that most patients have some knowledge about “cortisone shots”, but as a rule have very little understanding.
Perhaps we can help clear up some of the misconceptions about steroids, at least as they are used in my practice.

Their Indication
Stated in one sentence, injections are given to relieve pain and inflammation and to improve the person’s function, hopefully for an extended period of time.

What Are Their Names?
I am giving you only their “first” names to make it less confusing, O.K. There are innumerable more steroid preparations, but these are the ones that are used frequently.
Methylprednisolone
Triamcinolone
Betamethasone
Dexamethasone

Their potency and duration of action and response vary somewhat, but you really don’t need to know all that unless your Ph.D. is in Biochemistry! However, it is important that I know.

How Do They Work?
Hmm, where to start?
• Corticosteroids decrease initial events in the inflammation process
• They are catabolic, that is they block glucose uptake in tissues and cause protein breakdown
• They decrease new protein formation
• This decrease is in muscle, skin, bone, connective tissue and lymphoid tissue (T cells).

How I Use Them
99% of my use of corticosteroids is in the injectable form. The doses used are not proportional to the oral dose. The reason is due to absorption by the tissues and the synovial lining of joints and how much gets out into the body. Internists and Family Physicians use these medications orally far more than Orthopaedic Surgeons.

Indications For Use
• Rheumatoid Arthritis – Used to control rheumatoid inflammation in joints especially in knees, elbows, hands and finger joints.
• Osteoarthritis – It is less effective than in rheumatoid arthritis. Cortisone is most often used in the knee joint and sometimes the shoulder, hip and hands.
• Gout(Crystal Arthritis) – Very helpful in patients with gout or pseudogout injected into the joint.
- Bursitis – A lot of injections are given for bursitis in the hip, shoulder and elbow. In the case of the hip I am injecting the bursa area at the side of the hip not into the joint. It is an important difference.
- Tenosynovitis – Inflammation around the tendons of the hands, wrists, feet and ankles is very common. Injections in these areas are used very cautiously, because it carries the risk of weakening the tendon you are trying to help and it can rupture. Gulp!
- Carpal Tunnel – Sometimes, but not often. Symptoms usually return and the nerve is very close and nerves don’t like to be touched by the injecting needle!
- Ganglions – They are rarely injected because you don’t get rid of the tissue capsule and the swelling (jelly) returns.

**How Dr. H. Injects**

This is how I do it.

I indent the skin area with a small plastic circle. Prep the skin with Betadine. Next anesthetize the skin with a local anesthetic thru a small needle and wait about 10 minutes. Then inject the steroid, mixing it with local anesthetic prior to the injection. Apply a sterile dressing and ask the patient to apply ice if needed and relatively rest the part for about 24 hours. Injecting the local anesthetic first is the key. Dentists always do this first.

**What Else?**

- Temporary increase in blood sugar
- Soreness is usual in area injected for 24 – 48 hours (apply ice)
- Loss of underlying fatty tissue and skin pigment (rare) near the area injected
- Post injection infection (extremely rare)

In closing, injections are often used in my practice and can be valuable in decreasing pain and increasing function.

Injections are only given if the patient agrees and is informed about it. Never “talk anyone into a shot”. Lots of folks have strong opinions about injections and refuse. Perfectly O.K. We try to do something else for them.

Hopefully you understand more about anti-inflammatory injections. It would be hard to practice Orthopaedics without them. Thanks for reading! See you next week.

*My patients put their trust in me and what I do improves the quality of their lives.*

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Be well.

315 Warwick Drive
Alma, Michigan 48801
Phone 989-463-6092 for an appointment.

Dr. Haverbush