

JOINT INJECTIONS FOR ARTHRITIS:**Another tool in the toolbox for treating arthritis in your pet's joints****Overview—“I don’t understand what a joint injection is; please help me understand the condition and the treatment.”**

The majority of the time, the type of arthritis we are talking about in dogs is a degenerative osteoarthritis that comes from 1) the wear and tear of life, 2) a developmental/structural joint abnormality (hip or elbow dysplasia), and/or 3) the fallout from a joint injury later in life (ligament tear, fracture). This condition is a relatively slow process over time that gradually wears away normal cartilage and stiffens up the surrounding structures.

Inflammation is involved; a chronically inflamed joint puts the normal cells of the joint under constant stress and ultimately destroys them little by little. Instability is often involved; a chronically unstable joint puts the support structures of the joint under constant stress and ultimately causes them to toughen up and get stiffer. The end result is a joint that does not move as freely as it used to and the sensation of varying degrees of pain.

In advanced osteoarthritis, we see “bone on bone” contact. The reason this is uncomfortable is that normal joint cartilage doesn’t have nerve endings on the surface, but the exposed bone underneath does. Once the cartilage is “worn away”, the bone on one side of the joint “feels” the movement of the bone on the other side of the joint—varying degrees of pain is the sensation.

One approach to controlling the difficulties experienced with osteoarthritis is to apply medication directly to the joint itself, instead of giving oral medication for an indirect delivery. We commonly use two different medications, alone or together, depending on the individual case—hyaluronic acid (HA) and triamcinolone (a steroid).

Hyaluronic acid is a substance that is normally found in joints. It is very slippery and improves the physical environment of the joint. This likely reduces the inflammation in the joint and acts to make the joint more comfortable as well as prevent ongoing damage. The medication itself is beneficial or neutral.

Triamcinolone is a **steroid medication** (one of several used in joints) of the type to dramatically reduce inflammation. It is very good at sharply reducing the pain coming from an arthritic joint. The medication itself is beneficial, but with prolonged use, it is also detrimental to normal joint cells.

“Why is this procedure being recommended for my pet?”

Osteoarthritis is a condition that is managed over time, not “cured” with one treatment. (See additional Pet Owner series “*Conservative Management of Osteoarthritis*” at www.directvetsurg.com). The recommendation for joint injections comes when **the management needs to step up to meet the demands** of patient comfort and performance. This might be after a sudden worsening that needs to be quieted down so other conservative methods can get back to controlling things. Or this might be for ongoing situations that just need more.

“What post-treatment complications do I need to know and understand when considering joint injections?”

Joints are a closed environment with very low blood supply and thus a poor ability to handle invasion of bacteria. To deliver the medication into the joint space, we must travel through the skin with a needle. Even after thoroughly preparing the skin with antiseptics (much like we do with surgical skin preparations), normal bacteria are still living on/in the skin. These can be carried into the joint on a needle during injection.

If this happens and those bacteria multiply, an infection will result. Joint infections are an extremely rare complication, but serious if they do happen. They require aggressive antibiotic treatment and sometimes surgical flushing out of a joint; and the inflammation insult to the joint tissues is very unhealthy.

Careful monitoring of your pet after injection and quick reporting of any dramatic worsening of joint pain is essential to catching an infection early and successfully managing it.

Most joints will require a very brief anesthesia/sedation to allow a successful and safe injection—the patient must be 100% still to do this treatment properly. One to two minutes is all that is needed. The medication options we have for this type of anesthesia/sedation are very safe and the risks are low. Please discuss these issues with your veterinarian who will be managing the anesthesia/sedation portion of this treatment.

“Are there situations when the treatment outcome is not what we hoped it would be?”

As mentioned above, osteoarthritis is a “managed” condition. One shot in the joint will not make it go away. Joint injections will disappoint if that is the expectation. And the poor function of an arthritic joint is not always related to pain; if the poor function (limping, stiffness, difficulties with movement) is mostly related to the joint support structures being thickened and inflexible, the results of the joint injection will not look like improvement. This is not necessarily a bad thing; it is helpful to learn that your pet’s limping is less about pain and more about stiffness.

“Are there things I can do to prepare myself, my home and/or my pet for this procedure?”

Repeat visits to the veterinarian for joint injections can create anxiety in pets. We do have medications that can be used to make this whole process **less stressful and better tolerated**. Please ask your veterinarian about an oral pre-visit medication to optimize the experience for you and your pet.

Often these patients are taking non-steroidal anti-inflammatory drugs (NSAIDs; carprofen, meloxicam, deracoxib, etc.) to treat their arthritis long-term. **These medications do not combine well** with the steroid medications we sometimes use in the joints. It is uncommon, but stomach ulcers, kidney problems and liver insult can result from this combination.

Ideally, we like a window of two weeks or so **without any NSAIDs** around the joint injection procedure. For many patients, they are dependent upon their NSAIDs for daily comfort, so stopping them can be troublesome. Reducing the dose of NSAIDs over several weeks is a helpful practice. Adding in stomach protecting medications can also be preventative against medication problems. Please ask your veterinarian about medication planning before and after the joint injections.

It is important that you have proper expectations about this procedure; your experience and you pet’s outcome will benefit greatly. Please discuss this information with your veterinarian when working through the decision-making process regarding **Joint Injections for Arthritis**.

(See additional materials at www.directvetsurg.com for pet owners and veterinary professionals.)