INTRA-ARTICULAR INJECTIONS FOR DJD:
Another tool in our toolbox for treating chronic degenerative joint disease (DJD)

Synopsis

There are times when the conservative management of degenerative joint disease (DJD) is insufficient to maintain a pet's quality of life. Circumstances include 1) the young/middle aged, highly active pet with an acute exacerbation of a chronic condition and 2) the older, more sedentary pet with a chronic, advancing condition.

Intra-articular therapy can be a dramatic addition to the management plan for both of these patients. But it is a step up from low-risk, conservative options, so **care must be taken in choosing the right patient, applying the technique safely and logically, and advising the owners** about balancing risks and benefits of the procedure.

Most joints require brief anesthesia for effective injection; the elbow is the exception. To find the joint and instill a small volume, the patient must remain still; even a brief twitch can ruin the accuracy of a joint injection. Depending on patient parameters, a quick down-and-up with Propofol, for example, is all that is needed—1-2min of working time. For excitable, anxious, aggressive patients, microdose dexmetatomadine IV can be beneficial for ALL species involved in these interactions. For the elbow, restraint in lateral recumbency with an additional "food restraint" is successful 90% of the time, in my hands. **Previsit, antianxiety medication with oral medications at home (Trazadone, Gabapentin, etc.) can be very helpful** for patients needing repetitive treatments over time.

Hyaluronic acid (HA) is a substance that will augment joint fluid properties, protect cartilage, and reduce joint inflammation. It is most useful over time, often with repetitive treatments. (Example elbow plan: Initial injection protocol—Treat 3x over 3-4wks; maintenance protocol—Treat 1x q3-6mo.)

Steroids (triamcinolone or methylprednisolone) are used for their sharply anti-inflammatory properties—to knock down a "hot" joint and allow other conservative/maintenance therapies to do their work. May be useful as a "trial" to confirm or deny the relationship of radiographic DJD to the clinical lameness (i.e. inject the bad xray joint and see if lameness improves.) Minimizing NSAIDs use around the time of steroid injections (2wk window) is ideal (but often not possible given pain levels); supporting stomach physiology with systemic antacids or gastroprotectants is prophylactic in these cases.

Complications that may arise with this procedure are:

- **Joint infection** (rare, but potentially very serious requiring varying degrees of therapeutic interventions.)
- Increased **joint pain** (usually 1-3d post-injection, self-limiting)
- Steroid-related **systemic issues** (gastric ulceration, PU/PD/polyphagia)

Poor post-treatment outcomes may be due to the above complications, and/or:

- **Lameness/disability unrelated** to joint DJD.
- **Lameness/disability partially controlled,** but not supported by addressing excess body weight, activity restrictions, and supplemental medications (See handouts—*Conservative Treatment DJD*).

What a surgeon needs prior to treatment:

- Affected leg/body part "marked" by owner for confirmation (wax "costume makeup" works well)

- Skin near the injection site(s) CLEAR of infection (papules, pustules, crusts, collarettes, etc.) If urgent treatment, owner must be alerted to *increased risk* of joint infections.
- Consider NSAIDs use history and work through risk:benefits of continuing use during steroid injection timeframe.

Proper owner expectations are important to a successful experience and patient outcomes. Please discuss this information with your clients while assisting them with decision-making around the use of **joint injections for DJD.**

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