

DOGS AND THEIR “ROTATOR CUFF INJURY”:**We don’t call it that, but close enough for a practical conversation****Overview—“I don’t understand what Shoulder Instability Complex is ; please help me understand the condition and the treatment.”**

A difficult condition to specifically diagnose, but common enough to generally diagnose, is the Shoulder Instability Complex (my term). Human medicine has the term “rotator cuff injury” as a catch-all for these types of injuries. In the past 20 years, veterinary medicine has not settled on a common term to describe the shoulder joint that is sore and may have one or more of the following anatomic structures injured-- biceps/infraspinatus/supraspinatus/teres major/teres minor tendons, glenohumeral ligaments, joint capsule, labrum of glenoid—but we all know it happens and has some common characteristics.

The signs you may see include a “head-bob” limping (never non-weight bearing/3-legged limping) that is worse after rest and warms out a bit. It usually starts very minorly and will be present for a while before it seems important enough to go get checked out. There can be brief episodes of really painful shoulder; and there can be good but transient response to initial pain medications and rest.

Most patients are “nut-zo” with activity, high energy, go-go-go personalities. Most are middle-aged and large breed (retriever-types). Little kids can get this too, so breed is not important for the diagnosis. It is also very common for the injured patient to be carrying excess body weight; the shoulders are doing more work than they were designed for.

Diagnosing this problem is relatively straight forward, generally, using an examination of the front leg. Specifically, to identify which tendon/ligament/structure is injured, takes more advanced imaging, such as ultrasound and CT scans. Both of these tests can be precise in identifying abnormal anatomy, but knowing this information (above and beyond the exam information) does not necessarily change what the recommendations will be for treatment. If there is any question with the exam findings, plain x-rays can help identify abnormalities that do not fall within this Shoulder Instability Complex diagnosis.

Treatment is not cut-n-dried. These are usually chronic, repetitive stress injuries that build up over time and then are “tweaked” into flaring up occasionally. Because of this, treatment is primarily lifestyle accommodation with intermittent medical intervention if flare ups are strong or prolonged.

Step one, if your pet does not have a lean-ideal body condition, discuss calorie restrictions with your primary care veterinary team to reach and maintain that lean-ideal goal. It is common for pet owners to be in “denial” or defensive about their pet’s body condition, so please, for the sake of your pet’s well-being (our only goal), do not take any discussions on this topic personally or with anger.

Step two, reduce to the degree possible, daily lifestyle situations that require jumping down from a significant height. (This height is relative to the patient height, so a sofa for a 10# dog is significant and a truck-bed for a 60# dog is significant.) And change/eliminate play activities that involve sudden stops and crazy direction changes, like throwing a Kong or Frisbee.

Step three, consult with a physical therapist to learn the best routines to “warm up” a dog for vigorous exercise (like field work, fetch, jogging, etc.) and integrate these techniques into daily life.

Step four, treat the current (and future) “tweaks” with either/both steroid joint injection and a shoulder brace (much like a shoulder sling would be for us, to significantly rest the joint). A surgeon can help with the joint injections, and a physical therapist can help fit and train a dog for a shoulder brace.

Surgery is not currently high on the list of treatment options for this injury. This may change with time, but data on different procedures to date shows worse or no-better outcomes with surgical procedures for most of the cases of Shoulder Instability Complex injury. There are a few procedures that might be useful in individual cases that do not respond to the above course of therapy.

“Why is a joint injection being presented as an option for my pet?”

If your pet is in the category of a “hotly painful” shoulder joint that is limiting additional physical therapy options, a steroid joint injection can quiet things down enough to get to the next step in therapy for the Shoulder Instability Complex injury.

A shoulder joint injection requires brief full sedation to eliminate any movement during the procedure. The injection is very low risk, but the primary complication (infection) can be very serious. Repeated steroid injections are discouraged because over time, steroid medications are harmful to joint health; without lifestyle modifications including PT, flare ups or persistent lameness will continue.

“What options do I have to treat my pet’s condition?”

Protecting an unstable and painful shoulder is difficult without external support. Merely resting a patient is insufficient to rest a shoulder. A shoulder brace that markedly limits shoulder movement can be a useful tool when initially quieting a painful and unstable joint; it is also useful for the future flare-ups. Because it is quite restrictive, many/most patients will not accept a shoulder brace without careful training. A consult with a physical therapist for guidance in the use of a shoulder brace is highly recommended.

Building shoulder muscles that act to pull the arm toward the body is a primary goal in a physical therapy plan. A plan is best achieved with an initial consult with a professional veterinary physical therapist. This may involve (minimally) a brief education of owners for home care or (maximally) daily/weekly PT clinic visits for a fully-fleshed shoulder therapy protocol. Thoroughly preparing a pet for exercise/work with stretching and warm up is another long-term goal of physical therapy.

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

As mentioned, a joint injection has a very low risk of inducing a joint infection, and although rare, it is a severe concern if it develops. Aggressive treatment with antibiotics, joint flushing, and ongoing monitoring will be needed if it develops.

At the time of joint injections, the skin around the site needs to be healthy. If your pet has “skin issues” currently or in the past, it is good practice to have the small site around the shoulder clipped of fur to evaluate the skin closely before scheduling the treatment.

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

“How is my pet’s life and lifestyle likely to change after this procedure?”

Most of these patients experience shoulder problems due to chronic repetitive stresses (either daily stress on a weak anatomy, or heavy stress on a normal anatomy); rarely should there be a “one and done” treatment expectation. Flare ups should be expected; the goal is to design a management plan that allows you to adjust lifestyle options and understand what signs will need a veterinary or physical therapy consult/exam in the future.

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

Ideally, we try not to combine the use of steroids (by joint injection or other route) with the oral use of NSAIDs (like carprofen/Rimadyl/Vetprofen; meloxidyl/Metacam; firocoxib/Previcox), because this can cause stomach ulcers. If the shoulder pain is severe, we can try to reduce the NSAIDs before/after the injection and add protective medications for the stomach. If the shoulder pain is not severe, and stopping the NSAIDs for 1-2wks before and after the injection is possible, that is preferred.

Supporting the shoulder with a shoulder brace is beneficial in many patients, even with a steroid injection. Investigating physical therapy consult options before the injection is a useful planning exercise.

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

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