

CONSERVATIVE MANAGEMENT OF OSTEOARTHRITIS

(aka: arthritis, degenerative joint disease, bone-on-bone)



I hear about it all the time, but what exactly is Osteoarthritis?

Osteoarthritis is a chronic degeneration that occurs in the various joints of the body. It can be seen in joints from the toes to the jaw! It occurs gradually over time but can develop even in young animals who have significantly abnormal joint anatomy. The underpinning abnormal process involved in the development and maintenance of osteoarthritis is “inflammation”. There are entire classes, books and even careers dedicated to the concept of “inflammation”, so very briefly, it is the presence of certain type of cells and biochemicals that, when present inside the joint, cause injury to cartilage. These same cells can be responsible for healing too, so it is more of a “systems out of balance” problem.

Things that simulate this “system out of balance” are,

- high levels of wear and tear (think: major league pitcher’s shoulder, long distance runner’s knees, geriatric anyone!)
- physical injury to a joint (think: broken bone)
- abnormal structural development of a joint (think: square peg in a round hole)
- poor stability of joint (think: a dislocated finger in a very wrong position!)

Does all osteoarthritis hurt?

The simple answer is “no”. The complex answer is “it depends”. And the meandering philosophical answer is “does it matter if it does?” We all experience aches and pains from time to time. Some of that is osteoarthritis, some is a pulled muscle, some is a tight tendon or joint capsule. Even youngsters will hurt themselves when over doing it, and then feel better shortly. Some of us are saddled with a particular pain that we carry around with us every day (from subtle to taxing), and we accommodate for it by not using the body part, by not bending over so far, by not putting full weight on it, or not lifting that whole box all at once. Sometimes we ignore it. And sometimes we treat it specifically with rest, heat, massage, wraps, stretching, joint supplements, anti-inflammatory/pain medications, steroid injections, joint replacement surgery.

Our pets experience the same thing. When the aches and pains are in the limbs, they limp. Probably every pet owner has experienced the dog with a “squirrel!” moment when the pet seems to forget they were just limping a moment before! Sometimes that results in an afternoon of regret (if pets experience regret); but the psychological benefit of the “squirrel!” probably makes up for it! So, pain is relative. An agile, four-legged pet can easily accommodate an arthritic ankle joint by holding it off the ground after they “tweaked” it during a moment of abandon. Some of the time, they take a little weight off of it when it is bothering them, and we see a limp. And then sometimes, after they “warm up”, the arthritic joint is not noticed by them or us.

Osteoarthritis becomes more of a compromise to our and our pets’ quality of life when the pain is never ending, at a fairly high level, in multiple locations, and preventing us from doing what we prefer to do or need to do. This is the situation we want to avoid (with prevention techniques and/or prophylactic surgery), and the situation we want to treat with progressively more involved therapies when we find it creeping its way into our lifestyle.

Why bother with a “conservative” approach to osteoarthritis?

A conservative approach in medicine (well, in finance too and many other disciplines) usually indicates that the risk-to-benefit ratio is strongly in the low risk : high benefit direction. As we talk about more and more “aggressive” approaches to any treatment, it means that there are more risks involved, and we need to make dang sure the likely benefits outweigh the risks!

Wikipedia: “The idiom **the straw that broke the camel's back**, alluding to the proverb "it is the last **straw** that breaks the **camel's back**", describes the seemingly minor or routine action which causes an unpredictably large and sudden reaction, because of the cumulative effect of small actions.”

In this case, the many small “conservative” actions are building to a large effect—no pain. Another way to look at it—pain happens after a threshold is reached. Abnormal chemicals and cells build up, cartilage cell after cartilage cell is damaged, until finally we experience the pain. To reverse that, we take small conservative steps to reduce the number of cells damaged and prevent the level of bad chemical and cells from accumulating over time (sometimes a lifetime!)

Another reason is that it is rare that we can “take it all back” once we do a more aggressive approach; the risks may creep in. Not every patient can wait through this slower conservative approach (they need the bigger potential benefits of an aggressive approach), but most of the conservative techniques will help any stage of treatment a patient needs.

What is the first step?

Ok, you asked! And I am going to be honest. Many people get mad, defensive. Myself as a pet owner included!

I professionally joke that it is actually the first THREE steps. Weight loss, weight loss, weight loss.

But seriously, two things are in play here. The first is the one everyone understands, (once they get past the defensiveness and denial.) If we have bad knees, they will hurt more if we carry around a 50# pack all day. True? Gravity adds to the “wear and tear” cause of and worsening of osteoarthritis.

The second element in play with excess body condition—ok, I’m going to say it—excess fat on the body, is not as intuitive to understand. Fat is actually a tissue, almost an organ in fact! It is made up of very active cells. These cells are known to be big players in the world of inflammation! (Remember what I said about that concept at the beginning—entire careers are devoted to understanding this stuff.) Distilling that all down to a very simple scientifically demonstrated reality—related large breed dogs, raised in the same environments, fed the same type of food, *differing only in the amount of food fed and thus the amount of fat on their body*—lean dogs lived 1.7 years longer than overweight dogs. Chronic inflammation is one of the culprits. **Bad for life**. These same lean dogs showed fewer signs of the joint issues noted on x-rays than their overweight siblings. Chronic inflammation is one of the culprits. **Bad for joints**.

What other conservative steps prevent or reduce the osteoarthritis effects on our pet?

Lifestyle—Adapt a pet’s lifestyle to their age and their known joint issues. This does not always mean we stop them from doing things. Remaining active is the key to remaining active!

Treat the Tweak-- Medicate for inflammation before “weekend warrior” activities. Investigate the use of joint wraps for known problem-joints during higher impact activities. Rest them after these big activities, but enforce ongoing, low-impact movement to reduce discomfort (“walk it off!”). Ice right after the Tweak; heat and massage a few days later.

High dose fish oil supplements—long-term use of medicinal doses of fish oil may go a long way toward diminishing the negative effect inflammation has on how pets “feel” their osteoarthritis and how cartilage is damaged in osteoarthritis.

Joint supplements—many products with the “building blocks of joint fluid and cartilage” (glucosamine, chondroitin, MSM, etc.) are found in the human and veterinary medical field. Many medical studies have been conducted trying to help us understand what role they may play in prevention and treatment of osteoarthritis. *The jury is still out.* What has been demonstrated is that they appear to *cause no harm* to the patients who use them.

As Needed Medication—When it hurts, try a dose of anti-inflammatory (NSAIDs) pain reliever or two. Use the lowest dose that gives relief. Use as needed. Other types of medications do not seem to have much effect on osteoarthritis discomfort.

Talk to your primary care veterinarian about optimal body weight, good nutrition plans, diagnosing osteoarthritis, supporting/treating osteoarthritis, and referrals for consults with physical therapists, rehabilitation specialists and surgeons as needed to optimize your pet’s mobility.

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