

ARTHRITIS STAGES & PROTOCOLS

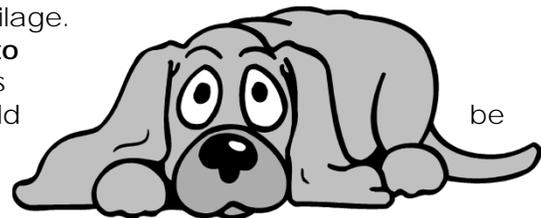


One of the most important concepts when it comes to anesthesia and pain management is that of "Multimodal Therapy." This means that using a combination of drugs or treatments usually leads to a much better outcome. For example, giving the drug butorphenol gives 1.5 hours of pain relief. Giving the drug metetomadine gives 2.5 hours of pain relief. Giving the two drugs together gives 6 hours – using the combination provides longer, better relief than using either drug alone.

This concept also applies to chronic pain conditions, such as arthritis. Using an NSAID (like aspirin or ibuprofen for people, Rimadyl, Metacam or Deramaxx for dogs or cats) by itself buys you a certain amount of relief. Combining it with glucosamine, fatty acids and/or MSM gives you better results. Adding acupuncture, weight loss or an exercise or rehabilitation program boosts results even further.

Arthritis is extremely common in pets, affecting almost all cats and dogs over the age of twelve. Joint problems such as hip dysplasia or a history of injury can lead to arthritis in even very young animals. Once present, arthritis always progresses, either quickly or slowly. The lining of the joint becomes inflamed, the cartilage slowly wears away and the bone responds by making new bone – the reason arthritic fingers become knobby over time.

The goal of treatment is to preserve and protect the cartilage. Once cartilage is gone it will never come back. **The key to keeping cartilage is to intervene early.** By the time pain is severe the cartilage is gone. For best results, arthritis should be diagnosed and treated very early, before cartilage damage occurs.



There are four stages of arthritic disease:

- 1) Young animals predisposed to osteoarthritis due to conformation or injury
- 2) Pets with current joint disease but little damage to joints and no symptoms
- 3) Pets with moderate damage and intermittent symptoms, often with decreased range of motion in the affected joints
- 4) Severe damage and signs, such as atrophied muscles, restricted range of motion, difficulty rising, jumping onto furniture, going up stairs or performing other activities

Multimodal therapy is a way to address arthritis, and what treatment modes are chosen will be based on the stage of disease present. As arthritis worsens over time, more modes may be added.

Stage 1: If we know that arthritis is likely down the road, we would like to start preventing it early. This means if your dog or cat has had a ligament injury, such as a torn ACL, a surgery affecting a joint, or an injury to a joint, you should consider him at stage 1. Advancing age or poor conformation, such as the little dog with kneecaps that slip in and out of place or the Basset hound whose front feet twist outwards, are reasons to think ahead.

Preventative measures include:

Hill's J/D, Purina's JM or equivalent diet made for joint disease. These contain fatty acids and/or glucosamine and have been shown to reduce joint inflammation. Or you can provide oral glucosamine and fish oil supplementation in addition to your pet's regular

food.

Weight control – 75% of dogs that are candidates for hip replacement surgery no longer need the surgery once they lose weight. Overweight dogs develop arthritis symptoms two years sooner than normal weight dogs. Keeping weight off is key in preserving joint health for at risk pets.

Low-impact exercise is best. Healthy cartilage is maintained by exercise, whereas damaged cartilage is further damaged by repeated impact. If we know the pet is at risk for joint problems, playing Frisbee is probably not a good idea but long walks are just the ticket. We can help you decide on an exercise program that reduces risk of injury and joint stress.

Stage 2: Arthroscopy is becoming more common in dogs.

Through “scoping” of joints, we are learning that many, many dogs have inflammation in the joint before they have lameness or other symptoms. Sometimes arthritis is found by accident on x-rays. Often these dogs are already overweight. This is the most difficult stage to address and treat because A) it’s not evident there is a problem and B) many owners are reluctant to believe their active, healthy appearing pet may have a serious problem simmering. Yet at this stage, the disease is the most preventable, and in fact early treatment can save years of suffering and a lot of money later on.

News Flash! Cats get arthritis, too. In fact **90% of cats over age twelve have arthritis visible on x-rays**. Most cats age fifteen or older are at least at Stage 2.



Treatment includes **all of the recommendations for Stage 1**, plus:

Anti-inflammatory drugs at the low end of the dosage range or intermittently. For example, if you know your dog will be rough housing with the neighbor’s dog or swimming at the cottage this weekend, some Rimadyl may be in order starting on Friday.

Adequan injections are more effective than oral glucosamine, and owners can learn how to administer them at home. Using Adequan in the early stages shows an 80% positive improvement rate after one month of treatment.

Stage 3: At this stage symptoms are starting to become more apparent. Usually when we perform the annual physical exam, we find that we can no longer extend the hips or shoulders as far as we used to do. There may be lameness, or there may just be inactivity – the owner notices the pet is “slowing down.” This is often because more than one area is sore and it’s difficult to limp on more than one leg. Inactivity is often a glaring sign of pain, should we choose to recognize it.

Treatment includes **all of the recommendations for Stage 1 & 2**. Additional treatments added at this stage include:

Very low-impact exercise, strength-building and range of motion exercises at home.

Daily administration of NSAID drugs at moderate dosages.

Additional nutritional supplements such as Boswellia, ASU, turmeric or hydrolyzed egg shell membrane. Adequan injections may still be useful. (See our handout called How to Choose Arthritis Supplements for more information.)

We might also add therapy laser treatments or acupuncture. (See our handout called Therapeutic Laser Therapy for more information.)

Intermittent use of stronger pain medications for pain flare-ups. (See our handout called Pain Medications 101 for more information)

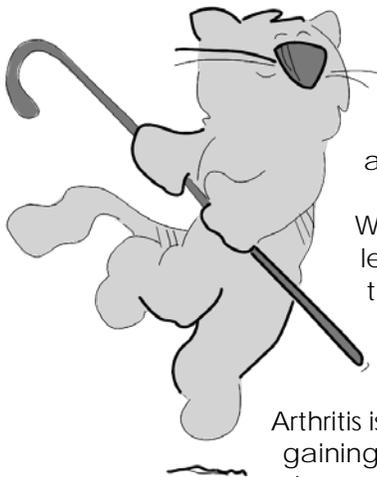
Stage 4: Pain can be severe at this stage. Lack of mobility is a life threatening disease – dogs who can't get up or walk anymore usually are euthanized. This is the stage we are trying to prevent by intervening early.

At this stage, the pet may resist, cry or even scream when the joint range of motion is tested. The cartilage is mostly gone, so preserving it is no longer an option, and much of the pain is stemming from bone rubbing on bone. Owners often are put in a position of deciding if the pet's quality of life warrants continued care – a position we like to avoid whenever possible. In order to maintain quality of life we may need to add:

Physical therapy such as underwater treadmill exercise. (See our Underwater Treadmill handout.)

High dosages of NSAIDs plus stronger drugs such as gabapentin, amantadine or opioids may be needed.

For cats, a similar progression exists, and some of the treatments we use for dogs, including glucosamine, Adequan, NSAIDs, gabapentin and acupuncture, can be used in cats as well. Many times elderly, arthritic cats have other disease problems we are also addressing. Arthritis treatment becomes an important component of keeping these senior pets as healthy and comfortable as possible.



Like any chronic disease process, monitoring is the responsible medical choice. X-rays should be taken to make sure another disease process or problem is showing similar symptoms. X-rays may also be advisable to monitor progression of the disease. If surgery is an option, the prognosis for long-term arthritis control is usually better.

When your pet is taking NSAID drugs, blood testing should be done at least once a year to ensure no organ damage is occurring from use of the drug, or that would change the safety or dosing of the medication. Extreme care should be used when changing from one drug to another and more than one NSAID is never given at the same time.

Arthritis is extremely common in both people and pets. The good news is we are gaining a better understanding of the disease process all the time, and new drugs and therapies are greatly extending the quality of care we are able to provide. Please ask us how we can help prevent or treat arthritis in your pet!

Visit our website, www.bestfriendsvet.com, or our BFVCTV channel at YouTube.com to watch videos on orthopedic conditions and rehab!