

Pain and Arthritis Management

What is Arthritis?

The simple definition of arthritis is inflammation of the joint. Signs of inflammation are pain, redness, heat, swelling, and/or loss of function of the affected joint(s). There are many causes of arthritis. It is important to know the cause of your pet's arthritis to ensure proper treatment. Possible causes of arthritis include injury (ex. fractures), improper joint growth and formation (ex. hip dysplasia), infection, immune-mediated (ex. rheumatoid arthritis), and abnormal wear on the joints (ex. obesity) to name a few.



What Options are there for Managing Pain?

There are many options for managing arthritis and its associated pain. Be sure to discuss the cause of your pet's arthritis with your veterinarian so you can together choose the best treatment options to help your pet. The major categories of arthritis treatment options include surgery, medications, and supplements. Arthritis can be a progressive condition and over time your pet may need multiple therapies.

- **Surgery**

If an orthopedic problem is diagnosed early, sometimes surgical correction can prevent or minimize the risk of arthritis later on in life. Early diagnosis is crucial which makes check-ups with your veterinarian important. Common joint surgeries are mentioned briefly. Surgeons can remove torn flaps of cartilage caused by a condition called OCD (osteochondritis desiccans) commonly found in the shoulders. They can correct knee joint instability due to ruptured ACL (anterior cruciate ligament tears) with extracapsular stabilization or a procedure called a TPLO (tibial plateau leveling osteotomy). Luxating patellas (knee caps that slide out of place) can also be corrected surgically. A TPO (triple pelvic osteotomy) is a preventative procedure performed on pets with hip dysplasia BEFORE arthritis has occurred. JPS (juvenile pubosymphysisodesis) is another surgery where the part of the pelvis is fused and is used to prevent arthritis in dogs with hip dysplasia. Once hip dysplasia has caused arthritis, a FHO (femoral head osteotomy) can be performed to remove the hip joint or a total hip replacement can be performed. Elbow arthritis can be treated with a joint replacement surgery as well.

- **Supplements**

NOTE: Supplements are not recognized as drugs by the government. Therefore, there is no regulation on supplements. For the most part supplements are considered safe and inexpensive. However, there isn't always scientific evidence to prove their efficacy. Quality can also vary from brand to brand and the amount of the active ingredient isn't always accurate which can also make response to treatment questionable.



Fatty Acids

Fatty acids have anti-inflammatory effects and benefit joint, eye, brain, heart, and skin health. Specifically EPA (eicosapentaenoic acid) is a bioactive fatty acid for canine cartilage and high levels in the diet have been clinically proven to help manage arthritis pain.



Glucosamine and Chondroitin

Used together to help repair collagen in the joints to help control inflammation.

MSM (Methylsulfonylmethane)

This supplement is derived from sulfur. It has anti-inflammatory and anti-oxidant properties to help with cell health.



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- **Medications**

Non-Steroidal Anti-Inflammatories (NSAIDs)

These drugs reduce inflammation, pain, and reduce fever. There are many NSAIDs on the market including Rimadyl, Metacam, Deramaxx, and Previcox. Most pets tolerate prescription NSAIDs well but will need monitoring of kidney and liver values by a simple blood test on a regular basis. NOTE: Not all NSAIDs are safe for dogs and cats, particularly common human over-the-counter versions. Acetaminophen is extremely toxic to cats. Ibuprofen and Naproxen (Aleve) are also extremely toxic to dogs as well as cats.



- **Steroids**

Like NSAIDs, steroids reduce inflammation, pain, and reduce fever. Steroids work well for arthritis and are necessary for treating immune-mediated conditions. However, there are many side effects associated with steroids including weight gain, panting, drinking and urinating more, higher risk of infections, hypertension, and adrenal gland suppression.

- **Tramadol**

This medication helps manage pain but doesn't directly block inflammation. Tramadol is inexpensive and usually well tolerated with minimal side effects. It has recently been classified as a controlled substance.

- **Opiate/Morphine Derivatives**

These medications help manage pain but doesn't directly block inflammation. They are commonly used pre/post operatively. Sometimes uncontrolled chronic pain can cause a "wind up effect" where pets are overly sensitive to pain. Some pets respond to hospitalization and a combination of IV narcotic analgesics to "reset" the pain threshold. Opiates can commonly cause sedation. This class of drug is controlled and tightly regulated.

- **Gabapentin**

This medication is used for pain deriving primarily from the brain or spine. It also can be helpful in conditions where patients have an exaggerated response to pain (may help with "wind up effect" pain). The most common side effect is drowsiness.

Other Options for Managing Arthritis

- **Weight Loss/Management**

If your pet is overweight or obese, the most helpful option to manage arthritis pain and mobility issues is to get the extra weight off your pet and his joints. If your pet is at an ideal body weight be sure to maintain him at a healthy weight.



- **Controlled Exercise**

Movement helps distribute the synovial fluid and lubricate the joints. Exercise helps maintain healthy muscles to help with mobility. Short walks or supervised swimming may be options for your pet.



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- **Joint Diets**

There are many brands of prescription diets for joint health. Hills J/D has high levels of EPA and ALA (Omega 3 fatty acids), glucosamine and chondroitin, carnitine to help maintain a healthy weight, and antioxidants which help repair damaged cells. J/D has been clinically proven to help reduce pain in dogs with arthritis. Studies have shown dogs with arthritis walk, run, and play better and climb stairs more easily when fed J/D.

- **Chiropractic Care**

There are many things that can cause your pet's bones and joints to fall out of alignment. Minor sprain/strains as well as changes in gait due to arthritis pain can commonly cause the spine and other parts of the skeletal system to lose alignment. This can contribute to pain since the muscles and nerves surrounding these areas are affected as well. Chiropractic adjustments can help re-align the spine and joints therefore alleviating pain and improve mobility. The frequency of adjustments varies from pet to pet.

- **Therapeutic Laser Therapy**

Therapeutic lasers use specific wavelengths of light to target the mitochondria of inflamed cells. This increases energy of the cells to speed up healing and reduce inflammation and pain. Initial therapy usually includes a treatment every other day for 3 treatments then as needed thereafter, usually once weekly to monthly. Each treatment only takes a few minutes.



- **Polysulfated Glycosaminoglycans (PGAGs)**

This enzyme inhibitor is found naturally in the joints of many species including dogs and cats. PGAGs help restore synovial fluid viscosity, reduces inflammation, and improves joint flexibility. Product name is Adequan and is given via an injection twice weekly for 1 month then 1-2 times monthly or as needed for maintenance.

- **Stem Cell Therapy**

Stem cells are cells that haven't differentiated to a specific cell type/function. When placed in an arthritic joint, they stimulate healing and regeneration. This helps restore range of motion and reduces inflammation and pain. Surgery is required to collect abdominal fat. Stem cells are harvested from the tissue in a special lab and then injected in the affected joints. Reactions and side effects are low and success has been high. However, stem cell therapy is expensive.

- **Acupuncture and Acupressure**

This is a practice of stimulating certain points of the body using needles and/or pressure to alleviate pain. Acupuncture originated in China and is considered a form of alternative medicine in both animals and humans. This is because there is a lack of scientific evidence behind the theory and effectiveness of acupuncture. However, it is generally considered safe when administered by properly trained practitioners and many people who have received acupuncture feel it has benefited them greatly.