



Osteoarthritis or degenerative joint disease (DJD) is the progressive and permanent deterioration of the articular cartilage of joints. It is initiated by mechanical stress including traumatic injury, instability, abnormal conformation, abnormal activity, etc. Pain associated with arthritis usually originates in the tendons, ligaments, subchondral bone, and joint capsule of the joint. Signs you might see in your dog include decreased activity level, unwillingness to perform certain tasks, intermittent lameness or stiff gait that slowly progresses. They may be slow to rise, especially in the rear legs. These signs may worsen with exercise, long periods of recumbency, and cold weather. Arthritis is very common in dogs and can be seen in young puppies with over 20% of dogs developing arthritis by 1 year of age.

Cats are a little different. An overt lameness may not be seen. They may have difficulty grooming, jumping onto furniture, accessing the litter box, or may just be more irritable. Cats tend to develop arthritis later in life with 90% typically having some sort of arthritis by 12 years old.

It is important to note that arthritis can be extremely painful and is not cured but rather managed.

Fatty Acid Supplements

EPA, DHA and ETA fatty acids are very beneficial to healthy joints. Fatty acids are an important component of cell membranes and supplementation aids in the healing of damaged cells seen with arthritis. Studies have revealed that high levels of ETA are most beneficial to joint health, therefore, a product high in ETA is preferred. Most fatty acids are available in liquid or gel caps. Several prescription and commercially available diets are available that contain high fatty acid levels. Daily, lifelong fatty acid supplementation is recommended in all arthritic pets. Antinol (Omega 3, ETA, EPA, DHA, DPA OTA plus 90 beneficial fatty acids)

Joint Supplements

Joint supplements are a safe and beneficial aid in joint healing and pain reduction. Glucosamine HCl and Chondroitin Sulfate are the main active ingredients found in these supplements. They are also the major components to the articular cartilage of every joint so daily supplementation gives the body the compounds needed to heal and cushion the joints. MSM is another compound that is routinely found in these supplements and helps reduce inflammation. Daily administration of joint supplements will slow the progression of arthritis and lifelong supplementation after arthritis has been diagnosed is recommended. Dasuquin (glucosamine/chondroitin), Cosequin (glucosamine/chondroitin)

Monoclonal Antibody Injections

Anti-nerve growth factor monoclonal antibodies (anti-NGFmAbs) bind to nerve growth factor (NGF) blocking its effects. NGF is an important neuro protein that activates pain neurons to transmit pain signals from the peripheral to the central nervous system. Treatment with anti-NGFmAbs binds NGF, inhibiting its effects and providing arthritis relief. Monthly injections are available for both dogs and cats. Librela (bedinvetmab), Solensia (frunevetmab)

NSAID's

Non-steroidal anti-inflammatories (NSAID) are the first line of pain relief medication for arthritis. This class of medication reduces inflammation in the joints while giving pain relief. There are several NSAID's available and can come with potential side effects, so it is important to have annual or bi-annual exams with blood testing on pets that have a history of liver or kidney problems or are on NSAID medications for an extended period. Pill or liquid formulations are available by prescription from your veterinarian. Rimadyl (carprofen), Metacam (meloxicam), Previcox (firocoxib)

Alternate Medications

Some pets with moderate to severe arthritis require additional medications to control their clinical signs. There are several medications available that will give relief to our severely arthritic pets. Many cannot be given together and strict compliance with your veterinarian is important to formulate a pain management protocol. Additional bloodwork or other testing may be required when additional medications are given. Additional medications are recommended under veterinary guidance on a case-by-case basis for moderate to severe arthritis. Neurontin (gabapentin), CBD, Tylenol (acetaminophen +/- codeine), Symmetrel (amantadine), Robaxin (methocarbamol), Ultram (tramadol)

Weight Loss

A major issue to address in any arthritic pet is obesity. Excess weight puts tremendous strain on the joints further causing trauma and pain. A strict weight loss program must be instituted and followed. Feeding fewer calories twice a day and eliminating or feeding low calorie treats including frozen green beans or carrots while documenting the progress with pictures, charts, and scheduled weigh-ins will help reach your pet's weight loss goals. It is recommended to feed a high-quality food twice a day at 1 (8oz) cup per 40 lbs (1/4c per 10lbs), based on ideal weight. Adjust the feeding amount as needed based on body condition. Your pet will feel better.

Controlled Exercise

Controlled exercise maintains the health of muscles and ligaments while decreasing joint inflammation. Aerobic exercise also combats the depression that occurs in many severely arthritic pets. Initially, only a few steps may be all your pet can take. At this stage, physical therapy is critical and may include range of motion exercises (ROM), underwater therapy, and other non or limited weight bearing exercises. Progress should be made to daily walking with the goal of controlled leash walking at least 20 minutes a day or 45 minutes 3 times a week.

Physical Therapy

Physical therapy is an exciting, safe, pain-free therapy that can give excellent results for all stages of arthritis. Multiple modalities are used to give the patient relief depending on their pain level and progress. Physical therapy stimulates and activates inflamed cells causing increased blood flow and dilation of the lymphatics to remove unwanted deleterious compounds away from the arthritic sites, reducing inflammation and pain. Physical therapy is a great way to slow the progression of arthritis and reduce pain and inflammation, safely. Laser therapy, Acupuncture, Underwater treadmill, ROM, Incline walks, Rocker board, Ball therapy

Surgical Treatments

There are several surgical procedures that can be performed for certain affected joints. Advanced surgical procedures are available as part of the primary treatment plan or if medical management fails to control clinical signs and your pet is still painful. Consult with your veterinarian for different surgical options. TPLO, MCP, MPL, FHO, THR, TKR, Arthroscopy, Arthrodesis

Steroid Anti-Inflammatories

If NSAID's are not giving enough relief due to the progression of arthritis, steroids may be started to reduce inflammation. Steroids are potent anti-inflammatories but do not offer any pain relief, therefore a separate pain medication must also be started. As with NSAID's, they do have potential side effects, making annual or bi-annual exams with blood work strongly recommended. Steroids can be used systemically with pill, liquid or long-acting injection options available. They are often used in joint injections offering local anti-inflammatory effects with reduced systemic side effects making it a safer option for their use. Prednisone, Dexamethasone, Triamcinolone, Depo-Medrol

Joint Injections

Individual joint injections can give immediate relief that can last an average of 6-12 months. Sedation is required and the individual joint sterilely prepped. A needle is placed into the joint and the desired medications are administered directly into the joint. Several different medications can be injected depending on the severity of arthritis.

-Amniotic Tissue Allograft: AlphaFlo® - is comprised of cytokines, growth factors, and extracellular matrix proteins that are naturally found in amniotic tissues. These tissues possess reported anti-inflammatory, anti-microbial, anti-fibrotic, and regenerative properties, that after processing, can be injected into joints or IV providing their benefits.

-PRP (Platelet Rich Plasma) - is a specific blood product made by concentrating a patient's own platelets and growth factors in a small volume of plasma (yellow colored fluid portion of blood in which whole blood cells are suspended). PRP can then be injected into joints to provide a concentrated version of the patient's own growth factors to improve signaling and recruitment of cells to optimize healing.

-Stem Cell Therapy - is a safe treatment that gives mild to severe arthritic pets much needed relief. A fat sample is surgically harvested from your pet and taken to a lab where the stem cells are extracted. These cells are then injected into the affected joints and possibly systemically in the vein.

PSGAG Injections

PolysulfatedGlycosaminoglycans (PSGAG) are mucopolysaccharide compounds found in all layers of articular cartilage of joints and when given by injection, this compound concentrates in damaged arthritic cartilage. PSGAG aides in cartilage healing and reduces inflammation and pain. It is safe to use systemically in pets with liver or kidney disease but must be given by injection in the muscle. PSGAG are commonly used in joint injections with steroids. Chondroprotac (PSGAG), Adequan (PSGAG)

Arthritis is a painful process that compromises quality of life, but with several treatment options available, management of your pet's pain and slowing the progression of the disease are achievable!