Arthritis in Dogs and Cats

Lyra Read, DVM

Arthritis, also known as osteoarthritis or degenerative joint disease (DJD), is a degenerative, progressive, and irreversible condition of the joints. It is characterized by the progressive loss of joint cartilage, bony spurs/growths, and the thickening and scarring of connective tissue around the joint, usually as a result of injury.

Approximately 25 percent of dogs are diagnosed with arthritis in their life time, and as many as 60 percent of dogs have evidence of it on radiographs. Arthritis is probably as common in cats as in dogs but are less likely to be associated with obvious clinical signs, such as lameness. In one study, 90 percent of cats over 12 years of age had radiographic signs of osteoarthritis.

Arthritis is classified as primary or secondary. Primary arthritis is associated with aging, due to years of wear and tear on the joints. Secondary arthritis is the result of an external event or force. This could include trauma such as Cranial Cruciate Ligament (aka CCL or ACL) injury, or a congenital joint abnormality like luxating patellas, elbow or hip dysplasia.

Diagnosis

Physical Examination Findings in Dogs

Lameness is the most obvious sign of pain. It may happen once in a while, be progressive (gets worse over time), or be persistent. By the time your dog is lame, the arthritis may be more severe.

We often hear owners say “my dog is slowing down due to age”, or “my dog won’t jump in the car any more”, or “my dog is afraid to use the stairs”. To us this means something is preventing your dog from being as mobile as they used to be, and it likely indicates pain. Stiffness is a common sign that often goes along with these complaints, and is usually more obvious after periods of rest. Stiffness and lameness may decrease when the dog warms up a bit with some activity. Lameness often gets worse after periods of overexertion. Pain, swelling, and decreased range of motion may be seen. Thickened joints, excess fluid in the joint space, and muscle weakening are likely to occur.

Physical Examination Findings in Cats

As opposed to the visible lameness seen commonly in dogs, many cats simply become less active, may hide, or develop behavioral changes, such as irritability, decreased grooming, or difficulty getting into position in the litterbox. Cats also may have joint swelling/thickening, too much fluid in the joint space, and decreased range of motion. There may or may not be pain when the cat’s affected joint is moved by you or your veterinarian.

Diagnostic Imaging

Radiographs may show excess fluid in the joints; the bony spurs; signs of an underlying disorder, such as elbow dysplasia, osteochondritis dissecans, hip dysplasia, or cruciate ligament rupture; and so forth.

Treatment, Management, and Prevention

It is not possible to cure arthritis. The goals are to alleviate your pet's discomfort, to minimize further degenerative changes to the joint, and to restore the joint's functionality. Multiple types of treatment are usually necessary to relieve pain, stiffness, and discomfort.

Managing your pet's weight is HUGELY important. Excess weight increases stress on the joints and muscles. If your pet is obese, your veterinarian will want your pet to lose weight. Daily, low-impact activities, such as walking and swimming, will not only help your pet with losing some pounds but can also improve joint mobility, muscle mass, and exercise tolerance.

Joint supplements known as chondroprotective agents will help support the cartilage and will have some anti-inflammatory effects. These agents will slow the breakdown of cartilage and/or provide the building blocks that can help build it. Some agents also increase joint fluid secretion and thus decrease inflammation.

The main components of chondroprotective agents are polysulfated glycosaminoglycan (PSGAG), glucosamine, and chondroitin sulfate. Oftentimes there is no improvement using chondroprotective therapies, and this failure may be due to starting them too late and too much cartilage has already been lost resulting in bone on bone. This is very painful. This is one important reason to identify arthritis early and start chondroprotective agents while there is still cartilage to repair.

Most oral joint supplements contain glucosamine and chondroitin, as well as other components, and are almost always recommended for arthritis. You can give your pet a human joint supplement but keep in mind there are no regulating agencies for these products. There can be literally anything in them, or nothing in them at all. For this reason we recommend a reputable veterinary joint supplement.

Injectable PSGAGs (Adequan) are given at the hospital, or in some cases we can teach owners how to give them at home. There are 8 injections given twice weekly for 4 weeks. After that we see many pets show a significant improvement. We can repeat the 8 injections as needed, or some pets benefit from a monthly “maintenance” injection. If there is no response after the 8 injections, we may discontinue use of PSGAGs. While more expensive than oral supplements, these injections provide a faster and longer-lasting response than the oral forms.

Some studies have found that dietary supplementation with fish oil omega-3 fatty acids can improve the clinical signs of arthritis in dogs, and may allow the NSAID dose to be reduced.

Non-steroidal anti-inflammatories (NSAIDs) are an important component of arthritis therapy in dogs. Side effects that you should be aware of include stomach upset, elevated liver enzymes, and potential worsening of chronic kidney disease. Therefore any pet taking an NSAID needs regular blood tests for monitoring.

Few NSAIDs are licensed for use in cats. Other prescription pain medications such as tramadol, gabapentin, and amantadine may provide pain relief in dogs, and sometimes in cats.

A new treatment is now available for cats called Solensia. This is a monthly injectable pain medication which has been approved for the treatment of pain in osteoarthritis patients. Ask us if Solensia may be right for your kitty.

Alternative therapies such as acupuncture, laser therapy, physical therapy, rehabilitation therapy (e.g. radial shock wave therapy, pulsed signal therapy), and other supplements may be beneficial in some canine patients.

Surgery

Your veterinarian may consider surgical options if your pet's response to medical treatment is low, or for certain underlying causes of arthritis, such as cranial cruciate ligament rupture. Reconstructive procedures can eliminate joint instability and correct the anatomic defects. If your pet has severe hip dysplasia, your veterinarian may suggest a total hip replacement and femoral head/neck ostectomy. If the arthritis is in the wrist or ankle (then joint fusion may be considered; this surgery is usually well tolerated and can result in reasonable functionality.

Monitoring and Prognosis

Your veterinarian may need to do periodic physical examinations to monitor your pet's response to therapy and the progression of the disease. In addition, if your pet is on an NSAID, blood tests including complete blood counts and biochemistry profiles, need to be done regularly to ensure there are no side effects impacting the liver or kidneys.

With therapy and careful monitoring, arthritis can be managed in many dogs and cats, resulting in a good quality of life that you and your pet will appreciate.