

Small Animal Arthritis

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Canine Arthritis

Arthritis is an inflammation of the joints causing pain and reduced mobility.

Joint Structure – see attached diagram

Different arthritic joint types:

- Fibrous – no movement when mature
- Synovial – freely moveable (see diagram). This structure will encompass ball and socket (hip), hinge (knee/elbow), gliding (carpus/hock) and pivot.
- Cartilagenous – limited movement ie vertebrae

Factors Influencing Arthritis:

- Age –predominantly in older dogs who have experienced more wear and tear, but not exclusive
- Size – increases weight and size puts more load on the joints
- Genetic Predisposition – conformation ie hip / elbow dysplasia, osteochondrosis, patella subluxation are all developmental or congenital abnormalities
- Excessive Weight – dogs' weight is a modifiable disease risk as in humans. Increased weight increases force applied to joints as does highly vigorous exercise
- Trauma – vigorous exercise during development, intra articular surgery, traumatic rupture ie ligament / dislocations / fractures

What You Can Do To Prevent or Reduce Effects of Arthritis

- Modify weight, weight loss
- Chondroprotective Drugs eg glycosamine - building block for healthy cartilage
- Chondroitin - building block for healthy cartilage
- Omega 3 as found in green lipped mussel, these are directly anti-inflammatory. Any damaged cell will release chemicals that set up an inflammatory pathway which in turn causes further destruction. Eicosanoids (found in omega oils) direct these pathways to less damaging ones and hence reduce effects

- Moderate regular exercise
- Physiotherapy
- Disease Modification – used before clinical signs arise, can be highly protective and delay the onset of osteoarthritis. Injections given weekly for 4 weeks stimulate chondrocytes to increase cartilage production, stimulate synovial cells to increase fluid production and also increase viscosity of fluid to protect cartilage from effects of degrading enzymes released from damaged chondrocytes.

Feline Arthritis

The feline joint is anatomically the same as dogs and humans and so the disease will be the same. What differs with most cats is the presentation of the disease as their behaviour differs greatly to dogs.

One of the most consistent findings is a change in their jumping behaviour. Crepitus (ie crunchy joints) or restrictions to range of movement are not as apparent. Careful palpation will reveal thickening of the joint. As cats are sedentary animals sleeping 20+ hours a day, especially when older, only a very astute owner (or vet) will pick up on subtle arthritic signs.

Cats will respond to the course of injections, glycosamines, chondroitin / omegas as will dogs and there are no contraindications with these. Once a case goes beyond the preventative and disease modifying in both cats and dogs, pain relief to give the animal comfort is all important.

There are many non steroidal, anti inflammatory drugs on the market for dogs. We are still able to use some excellent products that have been taken off the shelves for humans which gives us an advantage. Cats have a different metabolism to dogs and humans and need to be treated with more care. They cannot metabolise most of these compounds. The only drug registered for long term use in cats is meloxicam (metacam) and care needs to be taken ensuring renal function is not compromised both prior to and during treatment. Both cats and dogs undergoing long term treatment with anti inflammatories should be routinely screened for liver and kidney function. Even healthy older pets can benefit from an easy blood test.

When the problem is spinal degeneration, both in cats and dogs, the use of disease modification and neuticeuticals is of little value. Weight loss, physiotherapy etc will help and pain relief using nonsteroidal drugs or even steroids may be warranted.

Our aim is always to improve the quality of our beloved pets' later years, remembering they are often far more stoic and accepting than we humans are!