

Kingsbrook Animal Hospital

5322 New Design Road, Frederick, MD, 21703 Phone: (301) 631-6900 Website: KingsbrookVet.com

Arthritis in Cats (iCatCare)

Arthritis and degenerative joint disease in cats [1]

It is well recognised that as humans get older they are likely to suffer from joint pain caused by osteoarthritis. It is also well known that older dogs commonly suffer from arthritis and both owners and vets are familiar with the medication dispensed to relieve their pain.

However until relatively recently, arthritis in cats was not commonly diagnosed or treated. This may be due in part to the cats' survival instinct to hide signs of pain, and the lack of recognition of the condition by owners and veterinary surgeons.

Prevalence of arthritis in cats

Due to the challenges of diagnosing arthritis in cats, it can be difficult to tell how many cats are affected. However, recent studies looking at radiographs of older cats produced startling results. In one study published in 2002, 90% of cats over 12 years of age had evidence of degenerative joint disease. This included cats with so-called 'spondylosis' of the spine (a form of degenerative joint disease). However, even when these cases were excluded, around 2/3 of the cats still had radiographic signs of arthritis affecting the limb joints. More recent studies have shown radiographic evidence of arthritis in the limb joints affecting between 60% and more than 90% of cats. All these studies show that arthritis is actually very common in cats, that it is much more common (and more severe) in older cats, and that the shoulders, hips, elbows, knees (stifles) and ankles (tarsi) are the most commonly affected joints.

What causes arthritis in cats?

Osteoarthritis is a complicated type of arthritis in which the normal cartilage that cushions the joint degenerates and is worn away, resulting in inflammation, discomfort, ongoing damage and secondary changes in and around the joint. OA can be primary (without an obvious underlying cause, where the disease may arise at least in part due to mechanical 'wear and tear' in the joints) or secondary to a joint injury or abnormality as described below. The other major form of arthritis seen in humans is rheumatoid arthritis, which is (at least in part) an auto-immune disease.

At present it is not entirely clear what causes arthritis in cats. Further studies are needed to determine if this is similar to osteoarthritis in humans, where mechanical damage to the joints may be pivotal in development of the disease, or whether other factors are involved. At present, most cats with arthritis do not appear to have an obvious predisposing cause.

Some factors may increase the risk of arthritis in cats:

- Genetics certain breeds have an increased risk due to various underlying joint problems. This would include:
 - Hip dysplasia [2](abnormal development of the hip joints) seen especially in Maine Coon [3] cats (but also Persians [4], Siamese [5] and other breeds)

- Patella luxation (dislocation of the knee cap) which has been reported more commonly in Abyssinian [6] and Devon Rex [7] cats
- Scottish Folds [8] are particularly prone to severe arthritis affecting multiple joints due to an abnormality of cartilage that occurs in the breed
- Injury or trauma for examples fractures, dislocations and other joint injuries. These may cause abnormal joint conformation which can result in secondary osteoarthritis
- Obesity [9] there is no evidence that this causes arthritis, but it is likely to make an existing condition worse
- Acromegaly this is an unusual condition of older cats where a tumour in the pituitary gland secretes too much growth hormone. Affected cats usually develop diabetes mellitus [10], but some also develop secondary arthritis in their joints.

What are the signs of arthritis in cats?

Cats are masters of hiding discomfort and pain, so often do not demonstrate obvious signs that you might expect. They restrict their own activity to minimise the use of the sore joints and so tend not to show the same signs of arthritis as other animals. In particular, cats uncommonly show overt signs of limping or pain associated with arthritis.

Major signs of arthritis in cats associated with arthritis are:

- Reduced mobility
 - Reluctance, hesitance or refusal to jump up or down
 - Jumping up to lower surfaces than previously
 - Jumping up or down less frequently
 - Difficulty going up or down stairs
 - Stiffness in the legs, especially after sleeping or resting for a while; occasionally there may be obvious lameness
 - Difficulty using the litter tray
 - Difficulty getting in our our of the cat flap
- Reduced activity
 - · Increased time spent resting or sleeping
 - Not hunting or exploring the outdoor environment as frequently
 - Sleeping in different, easier to access sites
 - Reduced interaction and playing less with people or other animals
- Altered grooming
 - Reduced frequency or time spent grooming
 - Matted and scurfy coat
 - Sometimes overgrooming of painful joints
 - · Overgrown claws due to lack of activity and reduced sharpening of claws
- Temperament changes
 - More irritable or grumpy when handled or stroked

- More irritable or grumpy on contact with other animals
- Spending more time alone
- Avoiding intact with people and/or animals

How is arthritis diagnosed in cats?



A cat's elbow affected by severe OA

As arthritis is more common and more severe in older cats, it should be looked for in any mature (7 years plus) or older cat. A diagnosis is often based primarily on the presence of appropriate signs and chances in the home environment (see above). If you see any of these changes, it is important to have your cat checked by your vet as arthritis is an uncomfortable and painful condition.

When your vet examines your cat, they may be able to detect pain, discomfort, swelling or other changes affecting certain joints. If there is any uncertainty, your vet may suggest taking X-rays of the joints, but this is not always needed, and in some cases if the diagnosis is uncertain a simple trail treatment (with anti-inflammatory drugs) may be used.

Although further investigations such as blood and urine tests are note usually needed to investigate arthritis, your vet may suggest these if they think there may be another problem as well (which is not uncommon in older cats), or prior to starting some medications.

Managing arthritis in cats

Many options should be considered when managing a cat with arthritis, and it is not just about finding the right tablet to control the disease!

Environmental enrichment for arthritic cats



A soft warm bed is vital for the cat with OA

Modifying the environment in many ways can greatly help to maintain quality of life for an arthritic cat. Things to consider include:

- Use of soft, comfortable beds placed in easily accessible, quiet, draft-free locations use of 'igloo beds' can make an older cat feel warm and secure
- Provision of a series of 'steps' or a ramp to allow cats to access favoured higher sites (eg, the sofa, a windowsill, the cat flap etc.)
- Make sure the cat flap is very easy to open, and if necessary tie it open so the cat doesn't need to push through
- · Always have a litter tray inside and one that has at least one low side for easy access
- Make sure food and water are easily accessible, at floor level or with steps up to higher levels
- Make sure the cat doesn't have to go up or down stairs to access food, water, or litter trays
- Spend time grooming and cleaning an arthritic cat as this may be difficult for them
- Overgrown claws need regular cutting

Diet and dietary supplements

Obesity or being overweight will exacerbate arthritis and so should be avoided. Careful weight management is therefore very important for older cats. If your cat is overweight, they will benefit from carefully controlled weight loss, supervised by your vet. Your vet may also recommend a special diet to help achieve this safely and effectively.

Several dietary supplements and diets are available for cats with arthritis. The usually contain combinations of essential fatty acids (EFAs) that are designed to reduce inflammation, and glycosaminoglycans (such as glucosamine and chondroitin) that are the 'building blocks' of the cartilage in the joint and designed to improve cartilage quality. These diets and dietary supplements are generally very safe to use (but should only be used when recommended by your vet); however, their effectiveness in managing arthritis in cats is uncertain. If they have an effect, it is likely to be relatively mild and so may perhaps help in early cases of arthritis or as part of a management plan using other drugs as well. An additional problem is that the manufacture of dietary supplements (such as glucosamine and chondroitin) is poorly regulated so the quality of different products may vary enormously.

Medical treatment

Medications can be very effective at controlling the pain and inflammation associated with arthritis, but should only be used under direct supervision by your vet, as any drugs can have side-effects.

The most commonly used class of drugs for managing arthritic pain are non-steroidal anti-inflammatory drugs (NSAIDs). A number of different NSAIDs are licensed for use in cats in different countries, but the safety of these drugs varies, and care is especially needed when choosing a drug for long-term treatment. To minimise the risk of side-effects, the drug should be chosen carefully, and used carefully as well (using the lowest effective dose for the individual cat). For further information see: Non-steroidal anti-inflammatory drugs (NSAIDs) and your cat [11].

The first NSAID to have a license for long-term use in cats was meloxicam (Metacam; Boehringer-Ingelheim), and there is now extensive information on the use of this drug showing that it is effective in managing arthritis in cats, and when used appropriately (and at appropriate doses), significant side-effects are rare.

In some cats, alternative or supplemental analgesic (pain-killing) drugs may need to be used in cases where NSAIDs are not appropriate or not sufficient. Drugs that have been suggested (all of which must only be used under supervision by your vet) include:

- Buprenorphine
- Amantidine
- Tramadol
- Gabapentin

Additonal treatments

Acupuncture has been used in other species to treat the chronic pain of arthritis. The efficacy of acupuncture is still debated and this treatment has not been proven in controlled studies, but anecdotal reports suggest it could be a useful adjunctive therapy for some cats. It should always be performed by a specially trained vet and not used as a substitute for medication in severe cases.

 $\ensuremath{\mathbb{C}}$ International Cat Care. The information provided here has been put together by experts in feline health, behaviour and welfare. However, it is not intended to be used as a substitute for going to the vet.

Author: Kingsbrook Animal Hospital