

Feline Osteoarthritis

Osteoarthritis is very common in dogs and cats, it is estimated that around 30-50% of dogs and cats will be affected by osteoarthritis at some point in their lives.

What is osteoarthritis?

Osteoarthritis (also known as degenerative joint disease) is defined as progressive and permanent deterioration of the cartilage surrounding the joints. This causes inflammation, stiffness and pain. Degeneration of the joints involves multiple tissues, the cartilage, bone, joint capsule and fluid in the joint. When the cartilage deteriorates, it becomes thin and ineffective at absorbing shock, and spikes of crumbly new bone develop within the joint. Cats are reluctant to move the painful joints which consequently become stiff and less mobile.

What causes osteoarthritis?

Cats are more commonly affected by 'wear and tear' and consequently tend to be affected later in life compared to dogs, it can develop in young middle-aged cats, especially if the cat has had some type of trauma to the joint in the past (e.g. a road traffic accident). Regardless of the cause, once arthritis has started it tends to become worse with time.

What are the signs of arthritis?

To detect arthritis you must carefully observe your pet for signs of stiffness and pain. In some cases these signs can be quite subtle. It is also quite common for owners to think that if their pet is limping but not crying they are not in pain, this is unfortunately not the case, they are just better at hiding their pain! Any of the following may indicate arthritis in your cat.

- Difficulty standing after a long period of rest
- Difficulty getting through the cat flap or jumping on surfaces
- Reduced grooming
- Temperament changes (less tolerant around people, more withdrawn)
- Reduced activity (sleeping more, especially in one place)
- Limping or generalised stiffness
- Accidents in toilet training e.g. an arthritic cat may struggle to use a litter tray with high sides
- Alterations in sleeping behaviour and location

Some pets do not show signs until their arthritis is very severe. The sensitivity of signs shown may also vary day to day and will also be influenced by the weather and how active they have been that day.

How is osteoarthritis diagnosed?

The vet will take a thorough history and if you have identified any of the signs listed above this could indicate arthritis. The vet will watch your pet walking around the consult room to try and detect any lameness or stiffness.

They will carry out a full clinical examination in order to check for other causes of reduced exercise tolerance or reduced energy levels e.g. heart disease or neurological problems. In this exam they will feel and manipulate the joints to check for joint swelling or thickening, they will test the range of movement that each joint can complete, check for any pain or crepitus (grating of joint surfaces) when joints are manipulated, and any muscle wastage.

In some cases a diagnosis of osteoarthritis can be made on the basis of this examination. However, in other cases it will be necessary to take X-rays to confirm the diagnosis.

Your pet may be referred for an arthroscopy, this involves inspection of the inside of the joint with a camera and is carried out under general anaesthetic. This enables joint fluid to be collected for analysis and can be used to detect torn ligaments and remove any damaged fragments of bone.

How is osteoarthritis treated?

It is not possible to cure arthritis but it is possible to have a pain-free and active life with careful management and medication.

- 1. **Weight control.** As in humans, being overweight puts extra stress on the joints and bones. If your veterinary surgeon advises that your cat ought to lose weight, follow their advice as to how to achieve this safely. Usually we advise that you gradually reduce the total amount of complete cat food offered on a daily basis. Sudden, crash diets are not safe for cats. In difficult cases a prescription weight loss diet can be prescribed. We have free nurse weight clinics to provide support as weight control can be a challenge.
- 2. **Encourage gentle exercise.** Play games with your cat or take them outside to wander around the garden with you. Avoid the need to undertake high impact exercise by lowering the height of food bowls and sleeping places, or providing steps and ramps so that pets can reach these safely.
- 3. **Warmth.** Keeping your cat warm and dry will help with stiffness and discomfort. Some cats, particularly those that are fairly elderly and thin, will benefit from heat pads in their bedding. It is also sensible to check that your cat can reach a comfortable sleeping place without difficulty for example they may require steps or ramps to help them to reach their bed.
- 4. **Non-steroidal anti-inflammatory drugs (NSAIDs).** These medications are effective pain-relieving drugs. Because they block the pain caused by the arthritis, the effects of medication are usually noticeable within a day or so of starting treatment. Cats that are no longer in pain are likely to be more willing to exercise and this keeps joints more mobile and muscles stronger. Metacam is a NSAID licensed for long term use in cats. It is a liquid which can be given in food. Most cats tolerate Metacam well, however it can cause stomach upsets in some cases and these cats will have to stop taking the medication. Metacam is not suitable for cats with liver or kidney problems,

- so we recommend a blood test to check liver and kidney function before starting long-term treatment and monitoring blood tests yearly whilst cats are on treatment.
- 5. **J/D diet.** Hills have developed a prescription diet for cats with arthritis. This is available in tinned and dry formulations. The diet has a particular balance of fatty acids which are designed to reduce joint inflammation, thus helping with the discomfort and joint damage in arthritis. We stock the dry version of J/D at the surgery and can order in the tins at your request. Hills are so confident about the diet that they will refund the cost of the diet if you do not see any improvement after four weeks of feeding!
- 6. **Joint supplements.** It has long been suspected that supplements containing glucosamine, chondroitin sulphate and green-lipped mussel extract may help to slow down joint inflammation or assist in repair of damaged joints. Many human patients take these supplements and feel that they experience an improvement in their symptoms. Large scale studies have failed to produce scientific evidence to back up these reports but we continue to have clients reporting beneficial effects in their pets. Nutraquin+ has been forumulated for cats, it contains Boswellia extract in addition to glucosamine and chondroitin Boswellia has been shown to have independent anti-inflammatory properties so Nutraquin+ is our preferred preparation.
- 7. **Steroids.** Can be used to reduce inflammation in the joints. They may also have the side effect of improving appetite which can be useful in some older cats that are not eating well. However, on a long term basis steroids do tend to speed up muscle breakdown and can lower the body's immune defences so that cats are more vulnerable to infectious diseases. If they are used on a permanent basis it is best to try and reduce their use to a low dose on alternate days. Steroids are available as a tablet, or as a monthly injection, the tablets allow more flexible dosing.
- 8. **Buprenorphone and tramadol are human opiate-based pain killers.** A low dose is sometimes helpful in cats with pain not controlled by other medication and they can be used in combination with other medication. They may be most suitable for cats that are unable to take NSAID medication such as metacam. These medications are not licensed specifically for this use in cats but have been used for this purpose in many cases.
- 9. Acupuncture has also been shown to reduce pain in arthritic cats. It is most useful if used alongside conventional NSAID medication. Only a veterinary surgeon is legally permitted to perform acupuncture on animals. Please ask if you would like us to refer your pet to a veterinary surgeon with additional qualifications in acupuncture.
- 10. **Surgery.** In most cases of arthritis surgery is not an option. However, if the arthritis is only affecting one particular joint (for example a hip or an ankle joint following a road accident) then surgery may be advised to replace or stabilise the affected joint. Your veterinary surgeon will advise you if this is an option for your cat.

General approach

As osteoarthritis is a progressive condition, the treatment in any given case will need to be adapted from time to time. In general we would advise that cats with mild symptoms begin treatment with weight loss, exercise, warmth, and j/d diet. In more severe cases, or in cases which are not adequately controlled with the above measures, NSAIDs (or sometimes steroids) are indicated. We usually use a combination of treatments in each cat; the only medications that cannot be used together are NSAIDs and steroids.