



## *Osteoarthritis*

Information about Osteoarthritis for Pet Owners.

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*Osteoarthritis is a slowly evolving disorder of the synovial joints characterised by deterioration of joint cartilage and the formation of new bone at the joint surfaces and margins.*

### *What causes osteoarthritis?*

The initiation of this process is still poorly understood, but current theories include either abnormal forces on normal cartilage ("secondary OA", for example joint instability or dislocation) or normal forces on abnormal cartilage ("primary OA", for example osteochondrosis). In dogs, osteoarthritis is usually secondary.

### *How common is osteoarthritis?*

Between 8 and 20% of dogs suffer from osteoarthritis and there are an estimated 6.5 million dogs in the UK. It is harder to assess the incidence in cats as the signs are often missed and we don't really know how many are affected.

### *How will I know if my pet has osteoarthritis?*

The presenting signs are usually fairly typical, with lameness, stiffness after rest, reduced activity and altered behaviour being most commonly reported. Physical findings, unsurprisingly, include lameness, muscle loss, joint thickening/effusion, restricted joint movement and joint pain.

As in humans, the type of pain is variable over time (e.g. aching, stabbing, burning, exercise-induced, inactivity stiffness) just as is its intensity. Definitive diagnosis is by veterinary examination, radiography and in select cases joint fluid analysis. Additional tests that may be required include: joint inspection using arthroscopy ("key-hole surgery"), MRI, CT or nuclear medicine ("bone") scans.

The extent of change on radiographs gives no indication of the level of discomfort – look at your pet not the radiographs!

## ***Can osteoarthritis be cured?***

Just as in humans, unfortunately the condition is irreversible and requires life-long management.

## ***What are the options for treatment?***

### **1) Weight loss**

Weight loss is beneficial in reducing the degree of discomfort and also the rate of deterioration of the joint. This should be the first consideration. Strict dietary management is very important. This measure alone may be effective.

### **2) Exercise**

Exercise is important in maintaining muscle strength and fitness as well as in the control of body weight. As a general rule, exercise should be "little and often", typically three lead walks daily. The duration and intensity of exercise will depend on the severity and stage of OA. Low impact exercise and hydrotherapy (for dogs!) is beneficial in strengthening supporting muscles. If muscles are not allowed to stretch they may become contracted, and this contributes to the discomfort and lack of joint support on weight-bearing.

### **3) Pain control**

Nutritional supplementation with products such as omega-3 fatty acids, glucosamine, chondroitin sulphate, "green lipped muscle extract" may provide relief in some animals. There are many such supplements marketed for the treatment of osteoarthritis in humans and their use is becoming more common in dogs and cats. Despite the manufacturers' claims there is, in fact, little hard evidence to support their use. Anti-inflammatory medication will help, but dogs and especially cats are very sensitive to these medicines and only those prescribed by a vet should be used. Warm and cold compresses often help, either to warm up a stiff joint (e.g. for inactivity stiffness) or to suppress inflammation after exercise (cold). Deep, soft bedding should be provided.

### **4) Surgery**

There are some situations where there is an effective surgical treatment for the "primary" cause (e.g. cranial cruciate ligament rupture). In cases of severe pain that is not responsive to 1-3 above then options such as joint replacement (hip and elbow) or joint fusion (for example the carpus, hock or shoulder) might be considered. Arthroscopic treatment may provide some relief in a small number of cases (for example elbow dysplasia, osteochondritis dissecans).

Regular re-evaluation is helpful to monitor and adjust the management of this condition.

## ***What is the prognosis for osteoarthritis?***

Despite the fact that osteoarthritis is so common in the pet population and the unavoidable progression of this condition, the vast majority of dogs and cats are able to enjoy a good, or excellent, quality of life with appropriate management.

## ***Further information***

[www.arthritisdogs.net](http://www.arthritisdogs.net)

***If you are concerned about the health of your pet you should contact your veterinary surgeon.***