



**Arthritis is a familiar problem for most vets. A large number of dogs, and an increasing number of cats, suffer from arthritis. Arthritis simply means an inflammation of joints and animals with arthritis usually suffer with pain and stiffness in their joints. Although arthritis is typically a problem in older pets, many animals with arthritis have had signs of disease from an early age, as their arthritis is caused by problems with joint development.**

### What is arthritis?

In the normal joint the bone surfaces are covered with a thin layer of smooth cartilage. This is lubricated with a small amount of joint fluid. This allows the two surfaces to slide freely over one another. In animals with arthritis (also known as osteoarthritis) the cartilage in the joint changes or becomes damaged so that it is less smooth. The bone surfaces now rub together (rather than gliding) causing discomfort as well as further damage to the cartilage. With time new bone begins to form around the joint and this can cause the joint to become stiff and limit joint movement. This condition can also be called degenerative joint disease. Depending on the cause arthritis may affect just one or any number of joints.

### What causes arthritis?

In most cases arthritis develops as a consequence of abnormal rubbing within the joint. This can be due to:

- Instability of the joints, eg when ligaments have been damaged
- Damage to or abnormal development of the cartilage in the joint or
- Damage caused by trauma such as joint fractures and chronic sprains.

### How do I know if my dog has arthritis?

Arthritis causes pain and stiffness in the joints. If your pet has arthritis you may notice they are not as keen to exercise as in the past and they may limp or seem to be stiff (particularly when getting up from rest). This stiffness may get better after being out for a walk, and sometimes cold and/or damp weather may appear to make signs worse. Dogs will often lick continually at a painful joint and in dogs with pale coloured coats the saliva may start to stain the fur darker over the affected joint. Occasionally the joint may appear hot or swollen but more usually you will not be able to recognise any change in the joint. The signs in some animals can be very obvious whereas other pets may just become quieter or more grumpy if they are in discomfort.

### How do vets diagnose arthritis?

Your vet may suspect that your pet has arthritis from the signs you describe. By examining your pet's legs your vet should be able to identify which joints are painful, stiff or swollen. In order to find out more about what is going on inside the joint your vet may need to do further tests.

X-rays of the joint will help to confirm the presence of arthritis and to identify any underlying causes. Your vet may also take a small sample of fluid from inside the joint for analysis. In some cases blood samples may be required to look for medical conditions that can affect the joints. If your vet suspects that there is an infection in the joint they will want to take samples to try to identify the cause.

### Is there any treatment for arthritis?

The treatment for arthritis depends upon the underlying cause and the joint(s) affected. In almost all cases arthritis is worse in animals that are overweight and unfit. Treatment of osteoarthritis must be aimed at keeping the joint in use, minimising discomfort, and preserving the structures of the joint for as long as possible. Without a doubt the most important therapy for patients with osteoarthritis is the combination of weight control and exercise management, minimising the load on the joint, and maximising the range of movement and the fitness of the muscles around the joint.

Many patients will also benefit from drug therapy for a few weeks or months, and in occasional cases long-term drug therapy is useful. Initially pain relief is important and the most common veterinary analgesics used are the non-steroidal anti-inflammatory drugs (NSAIDs).



If your pet has arthritis your vet will often need to treat them on numerous occasions over their lifetime. The treatment used will vary both from one patient to the next, and for an individual patient over time. Your vet will want to use many treatments, singly, or more often in combination, to provide the best immediate and long-term solution for each patient.

## What drugs are used to treat arthritis?

### ***Chondroprotectants***

As cartilage damage is such an important part of arthritis it is clearly a good idea to try to limit this. Some drugs may reduce cartilage damage - these are described as chondroprotective. Drugs such as hyaluronic acid, polysulphated glycosaminoglycans and pentosan polysulphate may reduce cartilage degeneration, promote the repair of joint structures, and reduce inflammation. Unfortunately not all of these drugs are licensed for use in dogs and cats and some have to be injected into the joint to be effective.

There has been a recent rise in the use of the so-called nutraceuticals. These substances, (primarily glucosamine and chondroitin sulphate) are building blocks for cartilage. The theory is that providing these nutraceuticals in the diet provides the building blocks for the repair of cartilage within the joint and that this promotes relief from the signs of arthritis. There does appear to be some case for their use in the management of long-term osteoarthritis in people, and therefore they may be a useful addition to other therapy in animals.

### ***Anti-inflammatory drugs***

The NSAIDs seem ideal for management of arthritis as they have actions against both inflammation and pain. The potential problem with these drugs is that they can have some significant side effects. These side effects mean that there are some warnings against their long-term use in dogs, and that their use is quite restricted in cats.

In the short-term the drugs with the highest impact on analgesia and inflammation are likely to be the first choice. Often these drugs are not needed in the medium or long-term, or they are not licensed for such use due to the cumulative risk of side effects. In such cases, particularly in cats where the therapeutic options are more limited, alternatives must be sought. New drugs are becoming available and the development of a successful management plan for arthritis in the individual patient requires regular review of the current medication and how the patient is progressing.

## Will my dog get better?

Unfortunately once the cartilage in the joint has been damaged it rarely repairs completely. However, although there may still be damage in the joint many pets can be made pain free by long-term use of medication and management to control further wear on the joint.

There is a great variation in the severity of arthritis between patients. Many pets cope well with their disease, and lead a full and active life without any veterinary treatment. Some patients require treatment ranging from simple lifestyle changes to complex surgery. The signs of arthritis often vary throughout the animal's life and often result in the early onset of joint problems in old age.

**If you want any other information on health issues concerning your dog please contact your local Village Vet practice and we will be happy to advise you.**