

Pain killers

Despite being generally safe for long term use, as with all medications there is a small risk of potential side effects so the above listed measures should always be attempted first and maintained alongside pain killing drugs. Indeed these other measures may help to reduce the dosage of pain killers required, hence also reducing the risk of side effects, and the cost!

A variety of medications are available for dogs and cats, including tablets and liquid preparations. In general the front line medications available for pain relief are non-steroidal anti-inflammatory drugs (NSAIDs). Side effects are relatively uncommon but occasionally these lead to vomiting and/or diarrhoea, in which case they should be discontinued and a vet should be consulted. Over time occasionally we see problems with kidney and liver disease associated with these drugs, hence we advise regular blood tests to check organ function for pets on long term medication. Very rarely severe side effects do happen such as stomach ulcers, that can rupture requiring emergency treatment.

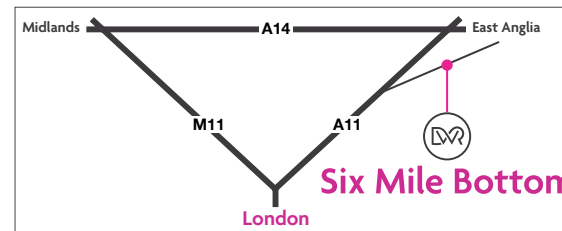
In addition to NSAIDs, there is a wide variety of other drugs which we can consider using in combination with, or instead of, NSAIDs for patients for which these are not appropriate, including paracetamol, gabapentin, amantadine and opiates like tramadol, many of which are designed for human use and may not have a licence for dogs and cats

Every animal can respond differently to painkillers. Some animals require daily treatment, where others may only require treatment on days when signs are more apparent. Some animals may respond better to a single daily dose given either in the morning or the evening, whereas others may be better with the dose split in half and given twice daily. Also some animals may respond better to one type of NSAID drug than another and so there may need to be some tweaking of the medication protocol for your pet in consultation with a vet.

It should be remembered that pain-killing drugs will mask the signs of pain associated with osteoarthritis but will not eliminate the underlying disease process and so over-exercise whilst on medication should be avoided.

How to arrange a referral appointment?

Following discussion with your first opinion veterinary surgeon, you may request to be referred to Dick White Referrals in order to benefit from our team of Specialist Orthopaedic Surgeons or for physiotherapy and hydrotherapy treatment. Our patients also benefit from Specialists in Anaesthesia and Analgesia to help keep them safe and comfortable during and after surgery. Our clinic is under veterinary supervision 24 hours/day and we have a dedicated nursing team caring for all patients during recovery.



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Osteoarthritis (OA) / Degenerative Joint Disease (DJD)



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What is Osteoarthritis?

Osteoarthritis is a very common problem in animals. It is reported that 20% of adult dogs are affected by the condition and 60% of cats over the age of 12 have signs of arthritis on x-rays. It is often difficult to detect osteoarthritis when examining your pet but it may be suspected in older patients and those suffering signs typical of joint diseases common in their breed.

There are many causes of arthritis including:

- Underlying joint disease/instability. (eg hip and elbow dysplasia, cruciate ligament rupture);
- Traumatic damage to a joint or growth plate;
- Previous infection within a joint.

Articular cartilage, which lines the joint surface, is worn away in an arthritic joint and the joint fluid becomes less effective at lubricating and nourishing the joint. As a result the joint becomes stiff and painful and the body produces irregular new bone at the margins of the joint which, in time, contributes to the stiffness. Nerve endings are exposed and aggravated in the bone underlying the damaged cartilage.

Symptoms

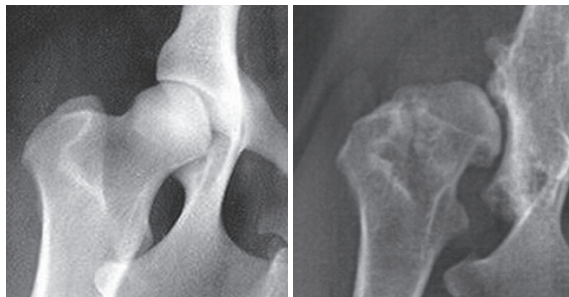
Pets may become lame with severe osteoarthritis, but signs can be more subtle in some animals, such as difficulty getting up, reluctance to climb stairs or jump into the car, or slowing down and becoming less energetic. These signs are often attributed to normal ageing. Symptoms are often more severe in affected animals in colder, damper weather conditions. Sometimes it is not until we trial treatment for chronic pain that we appreciate how severely a patient was affected before that treatment.

Clinical examination

When examined, animals with arthritis often have a reduced range of movement in the affected joints, with variable amounts of pain, joint swelling and crepitus (creaking).

Investigations

To investigate joint disease further it may be necessary to take x-rays or CT scans and, depending on the nature of the arthritis, blood samples, joint fluid samples or biopsies to assess for potential causes of joint disease.



Above left: an x-ray of a normal hip; right: an arthritic hip of a dog with hip dysplasia.

Treatment

Osteoarthritis is a chronic disease that cannot be reversed. Treatments are aimed at slowing the rate of progression, maximising mobility and minimising pain. Treatment falls into several categories, which should all be used together to maximise effectiveness. We call this combined approach 'multimodal therapy.'

- **Surgical treatment**
- **Non-surgical treatments:**
- **Weight control**
- **Controlled exercise**
- **Hydrotherapy and physiotherapy**
- **Nutraceuticals**
- **Pain killers**

Surgery

Often there is no surgical treatment for arthritis other than joint replacement or surgical fusion of a joint, and this is done only when all conservative options are exhausted and/or not effective, as outlined below.

Weight control

Ensuring your pet is not overweight is one of the most effective ways to reduce the strain on arthritic joints, slowing down the progression of disease and reducing the severity of signs. We know that excess fat is associated with natural chemicals that accelerate joint degeneration. Reduced ability to exercise will reduce your pet's energy expenditure and this will also need to be taken into consideration to prevent weight gain. Ideally an animal with joint disease should be on the slim side of normal. Your local veterinary practice may be able to assist by offering 'weight-watcher' type clinics and specific dietary advice.

Controlled exercise

The most important consideration when exercising a pet with osteoarthritis is to maintain regular gentle exercise, rather than occasional vigorous walks or long periods of rest. Over-exercising will increase strain and pain within affected joints, either at the time of or following exercise. Regular gentle exercise maintains muscle tone and joint flexibility and helps to promote blood flow. The level of exercise should be tailored to the individual pet's abilities. Sharp turns, sudden stops and repetitive activities such as chasing a ball should be avoided.

Hydrotherapy and physiotherapy

- Assessment by a registered veterinary hydrotherapist or physiotherapist can help to guide exercises to improve your pet's strength, and mobility and they will be able to target specific exercises to your pet's needs.
- **Swimming or walking on an underwater treadmill** helps your pet to build muscle and stimulate blood flow to affected limbs with reduced pressure through painful joints, and can help to encourage a full range of joint movement.
- Gentle **massage** of the limb and application of a **warm wheat bag** or **hot water bottle**, help to improve blood flow to affected joints.

- **Passive range of motions exercises**, performed following massage of the muscles, gently flexing and extending the joints of a limb, moving the foot in circular motions (as if cycling) with your pet lying on its side, are useful for stimulating muscle activity. 10 repetitions 2 – 3 times a day are recommended as long as this does not cause your pet pain and is well tolerated without resistance. **Tailored home exercises** can also be advised and demonstrated during physiotherapy treatment sessions.
- **Acupuncture** may also be helpful in alleviating muscle tension and pain associated with arthritis.
- **Pulsed electromagnetic field therapy** and **lasers** may be used to help reduce pain and inflammation during the context of a physiotherapy treatment session.

Home management

Ramps may be considered to help getting in and out of cars. Access to stairs and furniture, which may be climbed on and off, should be avoided or assisted with **steps** or ramps to limit the impact of jumping. **Mats** or rugs should be considered to prevent slipping on smooth floors.

Nutraceuticals

Nutraceuticals are non-prescription medications that are aimed at helping to maintain joint function by improving cartilage repair, blood flow to the joint surface and joint lubrication. They may also modify chemical signals involved in inflammation and help to reduce pain associated with arthritis. Joint supplements come in a number of forms:

- **Prescription Diets:** Royal Canin Mobility, Hills J/D, Purina JM – purpose designed diets to include glucosamine, chondroitin, green-lipped muscle extract, essential oils, eicosopentonic acid (EPA) and various other supplements.
- **Dietary Supplements:** e.g. Antinol, Yumove, Dasuquin, Seraquin; these are tablets or capsules containing the above supplements to be given with an existing diet. Specific veterinary formulations are designed to be palatable for your pet and come with appropriate dose guidelines. Human formulations tend to be more cost effective and are widely available in pharmacies and supermarkets.
- **Cartrophen injections** – a course of injections of pentosan polysulphate, which stimulate glycosaminoglycan production within the joints. These are not available at DWR as the supportive evidence showing positive outcome is weak, but may be considered in combination with other treatments.