

Arthritis in dogs

Osteoarthritis is a common condition in dogs that affects joints, causing them to become inflamed, and in turn swollen and painful. Arthritis affects the dog's mobility, making it difficult and uncomfortable to move around. Unfortunately arthritis is progressive, so it is inevitable that it will slowly get worse over time. Sadly arthritis cannot be cured, but there are several treatment options available to slow down its progression and manage the pain. The treatment of arthritis is multimodal, using conventional medication, complementary therapies and lifestyle modifications.



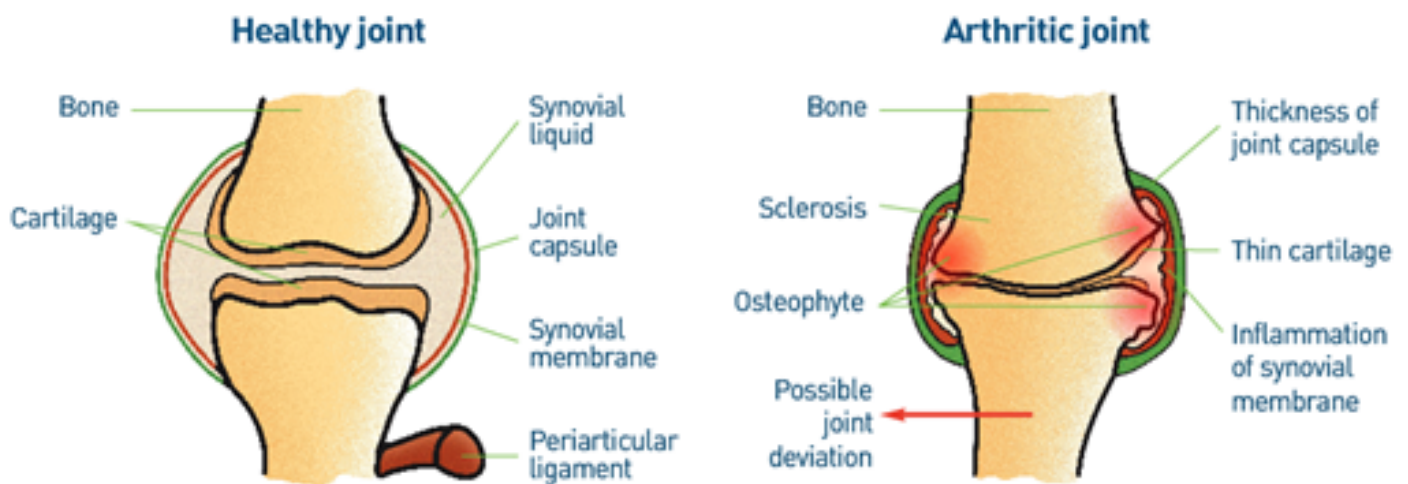
What is osteoarthritis?

Bones in a healthy joint have a smooth surface covered in cartilage, which allows them to glide passed each other when moving around.

A joint with arthritis develops a worn, uneven surface, so instead of gliding smoothly, the bone surfaces rub against each other, causing swelling, inflammation and pain.

With time, the arthritic joints start to produce new bone that isn't needed, gradually causing them to become thickened and stiff, with a decreased range of motion on flexion and

extension of the limbs. The extra bone (osteophytosis) causes more pain as your dog moves around. Sometimes this can be so severe, that the joint fuses itself.



Symptoms

- stiffness, especially after being laid down or after exercise
- lameness (limping)
- slowing down on walks, lagging behind
- reluctance to jump in to the car or climb stairs
- being quiet or grumpy
- sleeping more or seeming withdrawn from the family
- licking joints or saliva stained fur around painful joints
- swollen or thickened joints
- muscle wastage
- narrow stance and weakness in the back legs
- bunny hopping when running.

Causes of arthritis

- **Dysplastic joints and conformational abnormalities**

If your dog has abnormally shaped joints that don't fit together perfectly (e.g. hip or elbow dysplasia), have abnormally shaped bones (e.g. angular limb deformities - known as "Queen Anne legs"), have patella luxation particularly in toy breeds, or abnormal cartilage (e.g. OCD lesions), there is a high chance that they will develop osteoarthritis.

- **Genetics**

Unfortunately some breeds of dog are born with an increased risk of developing arthritis, often secondary to dysplastic joints. Examples of predisposed breeds include:

- Labradors (hips and elbows)
- Golden Retrievers (hips)

- Springer Spaniels (elbows)
- German Shepherds (hips, elbows and spine)
- Bernese Mountain dogs (hips and elbows)
- Rottweilers (hips and elbows)

Screening schemes are in place for all breeds to try to improve their genetics. This involves hip and elbow scoring them prior to breeding by x-raying their joints and submitting the images to the BVA (British Veterinary Association) and Kennel Club scheme, or the Australian equivalent.

- **Old age, and wear and tear**

As dogs age, their joints naturally experience wear and tear, making older dogs more susceptible to arthritis. Dog that endure high level activity can lead worsening arthritis, such as in working dogs, gundog or agility dogs.



- **Weight**

If a dog is carrying excessive weight, it puts extra load and strain on joints, accelerating cartilage damage and subsequently increasing the risk of arthritis.

- **Lifestyle**

Conversely, both inactivity and excessive exercise, along with an inappropriate diet, can contribute to arthritis but affecting growth, joint health and weight management.

- **Injuries**

Injuries such as fractures and ligament damage often lead to arthritis as the dog ages too. For example, cruciate ligament disease can lead to abnormal joint mechanics, increasing the likelihood of arthritis developing.

- **Neutering**

Spaying or castrating dogs has been link to an increased risk of cruciate ligament disease and an increased risk of osteoarthritis in some studies, particularly if performed too soon. We would recommend waiting until your dog reaches skeletal maturity before even considering neutering. Please ask one of the team for advice about whether to neuter your dog and if so, when to do it.

Diagnosis

The vet will have a suspicion of osteoarthritis based on a history of clinical signs. They will carry out a physical examination and check for stiffness, pain, swelling, reduced range of motion, or instability of the joints.

Where arthritis is suspected, and there is a possibility that there may be a joint surgery that could be helpful e.g. cruciate ligament surgery, corrective surgery for patella luxation, or hip replacement, then x-rays or a CT may be done to establish the underlying cause and to aid surgical planning. Diagnostic imaging may also be useful to rule out other causes of lameness e.g. panosteitis in growing dogs, or bone tumours in older dogs.



Treatment options

- **Pain relief**

Non-steroidal anti-inflammatories (NSAIDs) reduce swelling, inflammation and pain. There are usually given as an ongoing daily medication, or in the short-term to reduce flare ups, and come in tablet or liquid form. Some of the traditional NSAIDs can cause gastro-intestinal signs such as vomiting or diarrhoea. Nowadays, the newer COX-specific anti-inflammatories tend to have less side effects. For a dog on NSAIDs, we would recommend doing blood tests every 6-12 months to monitor their liver and kidney values.

Sometimes NSAIDs alone don't provide enough pain relief. There are plenty of other pain killing options available that can be used in conjunction with NSAIDs, such as paracetamol, gabapentin or pregabalin, memantine or amantadine, or ketamine injections. Most come from the human industry and therefore require an off-licence form to be signed.

- **Joint supplements**

Joint supplements such as glucosamine, chondroitin and green lipped mussel, can be used as a first line choice, and also in conjunction with other medications. There are not a replacement for conventional medication and don't work on all dogs.

Hills J-d has been clinically proven to help if fed as the sole diet. The kibble contains essential fatty acids, glucosamine, chondroitin and L-carnitine, so there would be no need to give a separate supplement.

- **Surgical options**

Surgery may be an option if the dog's arthritic pain is severe and uncontrollable. Joint surgeries such as arthrodesis (fusion of the joint by the application of a metal plate) or replacements (mainly hips, and elbows in few specialist centres around the UK) can be performed. Occasionally a salvage procedure such as a femoral head and neck excision or limb amputation may be considered if the pain is uncontrolled with medication or if there are cost constraints.

- **Hydrotherapy**

Hydrotherapy can be a useful form of therapeutic exercise that doesn't put too much strain on their joints. The warm water and water pressure can increase circulation, improve joint flexibility and reduce joint pain. The water resistance helps to build muscle mass and improve cardiovascular fitness and overall health.

Hydro can either be performed in a swimming pool or an underwater treadmill. The buoyancy and support of the water enable the dog to carry out flexion and extension exercises in a supported non weight-bearing environment or on the treadmill.



It is very useful for a wide range of conditions, including osteoarthritis, hip and elbow dysplasia, soft tissue injuries and spinal disease, as well as for dogs who have had recent orthopaedic surgery.

- **Physiotherapy**

Physiotherapy aims to reduce pain and restore optimum function after an injury, illness or surgery. A trained physio will give you exercises to continue at home with your dog, these are reward (treat) based and usually well tolerated.

- **Laser and acupuncture**

Laser therapy has many beneficial uses including accelerating healing by stimulating blood supply and oxygen to tissues, proliferating new cell growth, and alleviating chronic pain. Laser reduces inflammation, swelling, muscle spasms, stiffness and pain.

Veterinary acupuncture involves the insertion of thin, sterile needles into specific points on the body to stimulate nerves, muscles, and connective tissues. This stimulation can help to modulate pain signals, reduce inflammation, and promote healing. Acupuncture is often used alongside conventional treatments as part of an integrated approach to pain management and rehabilitation.

- **Weight management**

Being overweight puts extra strain and pressure on their joints. It is important to keep them slim. Dog food such as Hills Metabolic + J-d not only helps them to lose weight in a calorie controlled way but also includes beneficial joint supplements.

- **Exercise control**

Make sure your dog has walks, little and often. A sudden increase in exercise expectations can make your dog stiffer and more painful. Allow them to walk and run a little but avoid high intensity exercise such as jumping and ball chasing.

Unless advised against it by the vet, try to encourage your dog to get up and move around throughout the day. If they are left lying down for hours, their joints can become stiff and more painful. A little bit of movement can help reduce this.

Home care for arthritic pets

As well as medication and treatments prescribed by our vets, there are adjustments you can make at home to make your dog more comfortable, including:

- **Offer comfortable beds.** Your dog may wish to snuggle up in an enclosed bed or stretch out on a flat mattress. Memory foam mattresses are kind to joints. Recommendations of endorsed products can be found at <https://www.camonline.com/cam-endorsed/cam-endorsed-lifestyle-accessories>
- **Keep your dog warm.** Warmth helps soothe painful joints. You can use hot water bottles or wheat bags to warm individual joints. They should be wrapped in a towel and should not have direct contact with the skin. Never leave your dog alone unsupervised with a hot water bottle. You could also consider heat pads under your dog's bed to give them extra comfort, especially in winter.
- **Cover slippery floors in the house.** Dogs with arthritis have weaker muscles making it harder for them to get up and down, and making them more prone to slipping, which in turn can cause further injury. Using rugs, carpet runners or anti-slip mats to cover laminate or wooden floors can help to make them less slippery. You can concentrate on covering the areas your dog uses the most and create a path from their bed to the door.
- **Ramp for the car.** Jumping in and out of cars can be painful for older dogs. For small dogs, it may be possible for their owners to lift them in and out. For large breeds, why not get a ramp for the boot and gradually get them used to it.
- **Baby stair gates** are useful to block access to stairs around the house. Weak, arthritic dogs may struggle with stairs and therefore steps pose a risk of them falling. If it's not safe for you to safely carry your dog up and down stairs, then it is better to restrict their access and keep them downstairs.



Prevention

Age-related wear and tear cannot be prevented but there are several things that you can do to try to reduce the chance of your dog developing arthritis at an early age and to reduce the severity of the symptoms.

- **Weight control.** Keep your dog slim to ensure no extra strain is put on their joints.
- **Regular exercise.** Regular, controlled exercise and good fitness will help to keep your dog's muscles strong and take some of the strain off their joints.
- **Good quality food.** It is important to feed a good quality food for the correct life stage of your dog e.g. puppy, adult or senior. A complete puppy food will allow them to grow at the correct rate and will provide the correct nutrients.
- **Breeding schemes.** It is recommended to only breed from dogs with hip scores below the breed average and with a zero elbow score.

Prognosis

The prognosis varies from one pet to the next. Arthritis is a long-term condition that cannot be cured but needs lifelong management. Over time, the arthritis will slowly worsen but if well managed, most dogs can live happily for many years. However, it may limit some of the activities that they're able to do, such as agility or taking them on very long walks.

If you think your dog's pain isn't well controlled or the symptoms are recurring, please speak to us here at Claro Hill Vets. We have a wide range of different anti-inflammatories and other

painkillers, and if one isn't working adequately, our vets may suggest changing medication or adding in a new one.

Dogs with severe arthritis may stop responding to treatment and if your dog is very uncomfortable despite appropriate medication, you may need to consider making the difficult decision to put them to sleep. We will help to advise on this and we need to focus on whether your dog still has a good quality of life or not. Please ask us for advice.

To book in for your pet in for a health check please call us on 01423 228080 or visit www.clarohillvets.co.uk