

Canine Osteoarthritis

What is Canine Osteoarthritis

Canine osteoarthritis is very common. In dogs of 4 years of age or less 39.8% have osteoarthritis in at least one joint. This increases to 60% in dogs over the age of 4 years and 80% in dogs over the age of 8 years of age. In simple terms osteoarthritis means inflammation of a joint. However, osteoarthritis is a complicated disease process involving many factors. Osteoarthritis not only affects the cartilage of the joint but also the bone, joint capsule, tendons, ligaments and muscles.

Cartilage covers the ends of the bones that form the joint. It acts as cushioning and a shock absorber and provides smooth, frictionless motion between the bones. With osteoarthritis the cartilage starts to lose its cushioning and shock absorbency properties; it dries out and thins revealing the subchondral bone underneath. This results in the bone ends rubbing on each other causing further pain and inflammation. Osteophytes (bony spurs) develop and start to remodel the shape of the bone – it becomes rough and misshaped and this inhibits the smooth, normal range of motion of the joint. This results in the dog being stiff, limping or lame. Limping or lameness are an avoidance behaviour and therefore a good indicator that there may be a problem. Lack of correct movement and the additional strain placed on the joint due to the pain and inflammation results in wastage of the surrounding support structures - the tendons, ligaments and muscles causing further weakness, disuse and reduced mobility. Additionally the muscles that support the joint act as a “splint” to try and protect it and in doing so develop myofascial pain and trigger points.

Over compensation then occurs in the other limbs which have to work harder for the osteoarthritic one and muscular pain then develops in these limbs. If left untreated, the pain develops into chronic pain which results in “wind up” - the whole body becomes sensitive to pain and the signals are magnified. The term Degenerative Joint Disease (DJD) is synonymous with osteoarthritis and reflects the end stage nature of the disease. Degenerative joint disease can be extremely debilitating.

If the signs of osteoarthritis are recognised early a care plan put in place. With careful management and by using a multimodal approach the signs of osteoarthritis and progression of the disease can be slowed down.

How can Clinical Canine Massage help my dog?

Clinical canine massage is an excellent modality to help dogs with osteoarthritis. In recent clinical trials (2021) 95% of dogs responded positively to massage.

It can help to address areas of overcompensation and hypertonia (high toned muscles) in the affected limb and other limbs. It can address protective muscle splinting; muscles that cross an arthritic joint become shortened and inflexible resulting in increased pressure over the joint and therefore increased pain levels. It can help to improve joint range of motion, address secondary strains, trigger points and address myofascial pain. It can also help improve overall joint health by increased circulation and oxygenation to the tissues and removal of metabolic waste products.

What are the signs of Osteoarthritis?

A stiff gait, limping or lameness

Loss of flexibility

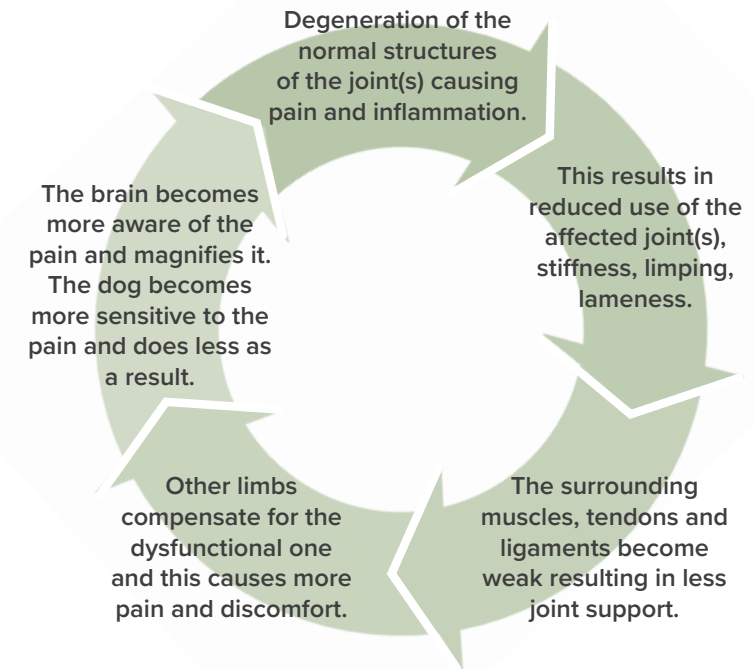
Reluctance to exercise, lagging behind on walks

Persistent licking of joints

The joints may feel warm, swollen and tender to touch

Changes to posture, shifting of bodyweight

Behaviour changes - reluctance to play, sleeping more, anxiety, changes in appetite



ACTIVITIES OF DAILY LIVING

By following some simple steps, you can help your dog to manage his osteoarthritis.



BODY WEIGHT

This is the number one factor should be put into place to help an arthritic dog. Prevention of obesity and optimizing body condition is key. Not only does excess body weight result in additional pressure through the joints but body fat also releases destructive enzymes resulting in further damage to the cartilage. Just a 6% reduction in body weight in patients with osteoarthritis is enough to start to improve their quality of life and lameness score. As an example, if a 35kg Labrador loses 6% it is a reduction to 33kgs - that is not much at all, but the impact can be huge!



STAIRS

Should be avoided where possible, particularly coming downstairs for a forelimb osteoarthritis and upstairs for a hind limb osteoarthritis. If your dog has to go upstairs, try and limit the frequency. Make sure he is supervised, to try and prevent slipping and falls and prevent slipping. Consider the use of a stair gate.



CARS

Jumping in and out of a car can be particularly troubling for a dog with osteoarthritis. Jumping out of a car puts pressure on the forelimb joints and jumping into a car puts pressure on the hind limb joints. An SUV type vehicle increases this by four times. Dogs should be lifted into and out of the car where possible or use a non-slip ramp or steps to help them get in and out.



FEEDING HEIGHT

Getting the feeding height right can greatly help the arthritic dog. Dogs naturally carry 60% of their body weight through their forelimbs. Stooping forward to eat and drink results in further weight transmission through these limbs. Raising food and water bowls reduces pressure through the wrist, elbow and shoulder joints and reduces tension of the neck muscles.



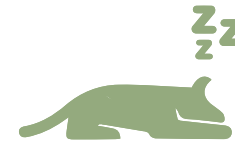
FLOORING

Today's modern homes can be a difficult environment for a dog living with osteoarthritis. Laminate and tiled floors may cause a dog to slip and slide. This can result in a lack of confidence in walking on the floor, muscle strains and further microtraumas to the joint/s resulting in an osteoarthritis flare up. Use antislip tape, mats and runners to help prevent slipping.



EXERCISE

Is important for both physical health and mental stimulation however, it must be done in moderation. It is far better to do 3 or 4 short walks a day rather than one big one. Find a distance where your dog can walk without showing signs of pain and discomfort (limping), reduce this by half and stay at this level until the limping has resolved. Walks can then slowly be built back up. Consider the surface that your dog walks on and try to walk on soft, low impact ground. Remember that one day may not be the same as the next day. It is OK for dogs to have a rest day. Try to be proactive and respond to your dog's needs and requirements.



SLEEP

Is vitally important. A dog that is in pain is likely to be restless and not sleep as well. A good, supporting bed such as one made from memory foam, or an orthopaedic mattress is ideal and one that allows the dog to stretch out fully is best to prevent cramping etc. Beds should be placed somewhere warm and not next to draughts.



PLAY

Is very important for mental stimulation but consider what toys your dog plays with. Avoid "chuck it" ball throwers and these can greatly exacerbate joint damage. Instead roll a ball across the ground or, if your dog must chase a ball change it to a Frisbee. Tug of war type toys can also cause further damage and microtraumas and should be avoided. Consider using mind / treat games for mental stimulation without much physical activity. There is an excellent book – "No walks, no worries" which is worth a read.



WEATHER

Cold, wet weather can make joints stiff and uncomfortable. Consider getting a coat for your dog to keep him warm and dry if it is wet outside. Always dry off as much as possible when you return from your walk to prevent the muscles from chilling which could result in injury. Avoid walking in snow as this can cause considerable joint discomfort due to the slippery surface and cold temperature. Consider where your dog dries off – he doesn't want to be on a cold utility room floor!