



WEAR REFERRALS

Small Animal Hospital

ORTHOPAEDICS

OSTEOARTHRITIS

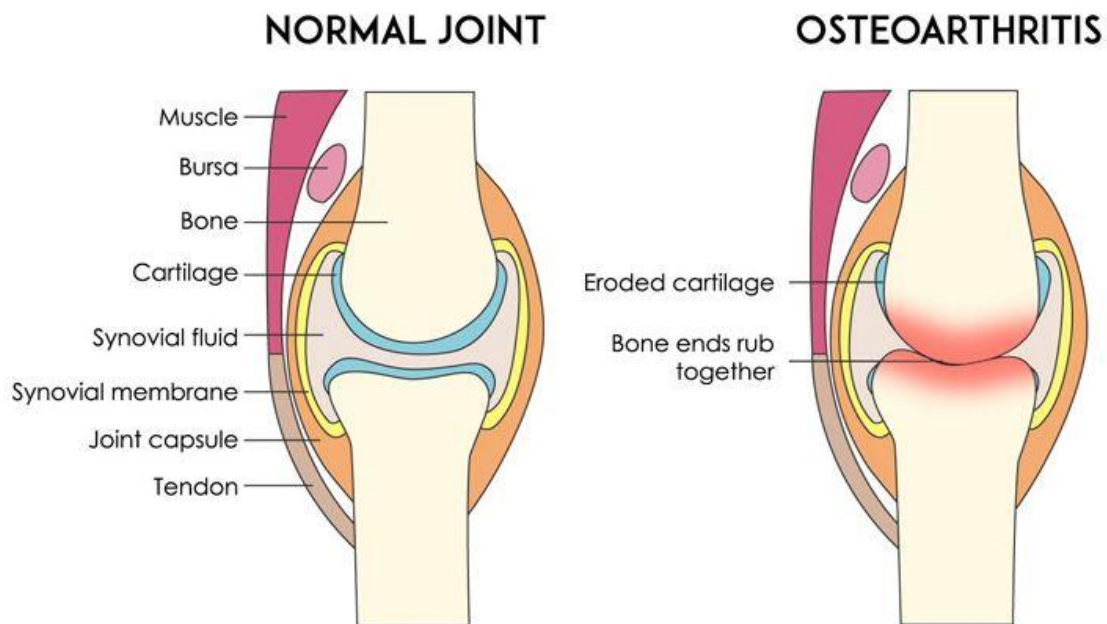
INFORMATION SHEET

OSTEOARTHRITIS INFORMATION SHEET

Osteoarthritis is a common diagnosis in animals and humans; it is the most common form of arthritis. Arthritis is merely the inflammation of a joint and the prefix “osteo” indicates that this inflammation is bony. Osteoarthritis generally occurs as a sequel to some other joint disorder such as a disruption of the cartilage in the joint, an injury to the joint, or just the joint ageing and “wearing out”.

In dogs the majority of the osteoarthritis we see in joints relates to developmental joint disease such as hip and elbow dysplasia. Alarmingly it is estimated that some 200,000 dogs are living with this condition in the U.K.

In response to osteoarthritis the body tries to increase stability by laying down bone around the joint but this new bone restricts the movement of the joint and can cause pain by impinging on the moving parts of the joint. Osteoarthritis is a long-term change, there is little we can do to remove the new bone so the treatment is aimed at allowing the animals maximum mobility without pain.



There are 5 keys approaches to the medical treatment of osteoarthritis:

1. **WEIGHT LOSS**
2. **MANAGEMENT OF EXERCISE**
3. **USE OF PAIN-KILLING / ANTI-INFLAMMATORY DRUGS**
4. **USE OF JOINT SUPPLEMENTS / NUTRACEUTICALS**
5. **REHAB THERAPY**

1. WEIGHT LOSS:

A great many of the dogs seen in veterinary practice are overweight. In the osteoarthritic patient this becomes a serious problem as every extra pound the dog carries is putting extra strain on the already damaged joints. Any exercise while the dog is overweight just increases the damage to the joints. So during the initial period of treatment STRICT DIETING WITH SHORT PERIODS OF LEAD ONLY EXERCISE must be adhered to until the dog is at, or even slightly below the correct weight. Once at a suitable

weight the dog must of course be kept carefully at this level and not allowed to put on weight ever again. A simple approach that will often result in expedient weight loss is to start your pet on a prescription weight loss diet (available from your local vets). If a certain weight of this food is fed each day and no other food (i.e. no treats) then weight loss should predictably occur. Regular weigh-ins every 2-3 weeks with your local vets can track the weight loss until optimum bodyweight were achieved.

2. MANAGEMENT OF EXERCISE:

During the initial period of dieting your dogs' exercise must be strictly restricted to avoid further damage to the arthritic joints. Once this period is over exercise may be gradually increased to the point at which the dog limits the amount itself. The key to this exercise is to increase it little by little with longer and longer walks on the lead followed by slowly increasing periods of activity off the lead. Few osteoarthritic patients ever gain the capacity for exercise of a healthy dog but many will get to 70% of such a capacity. Such an increase in exercise is rarely trouble free so exercise is managed on a DAY TO DAY basis. If the dog has a "bad day" e.g. a longer walk than usual or is more lame after exercise than usual, then one must restrict its exercise on the following day. Thus the amount of exercise is tailored to how the dog feels, and by extension to how well its joints are working.

3. USE OF PAIN-KILLING / ANTIINFLAMMATORY DRUGS

These drugs act be alleviating the pain and reducing some of the inflammation associated with the arthritic joint. Some owners may regard this as the best treatment as they often allow a speedy increase in the dog's exercise. However, these drugs do **LITTLE OR NOTHING TO HELP REPAIR OF THE DAMAGED JOINT**. An animal allowed to exercise freely while on these drugs will **INCREASE THE DAMAGE TO ITS JOINTS** as the discomfort which is the body's natural signal to "slow down" is masked by the drugs. These drugs are normally used in three ways:-

- A) **SINGLE DOSAGE.** The owner will give a single dose to the dog (from a small store prescribed for them) to alleviate the discomfort of a "bad day". **THE DOG MUST BE RESTED FOR THAT DAY.**
- B) **A COURSE.** Commonly prescribed by the Veterinary Surgeon after a consultation for a specific lameness and normally accompanied by exercise restriction.
- C) **PROLONGED THERAPY.** Given to dogs as a last resort when other methods of treatment have failed.

The reason that the prolonged therapy is a last resort is that not only do we have to accept that these animals will always have to have their exercise restricted to avoid too much further joint damage, but we also have to accept the serious risks of side effects of long-term therapy with such drugs.

4. USE OF JOINT SUPPLEMENTS / NUTRACEUTICALS

- A) Cod liver oil is high in omega-3 essential fatty acids and these have been shown to have anti-inflammatory properties in osteoarthritis joints. Supplementation of the diet with cod liver oil may help to reduce joint inflammation and increase joint range of motion. It is important that if supplementation is given that they are a majority of omega 3 and not 6 fatty acids; the latter are a precursor for inflammation in the joint.
- B) Glucosamine / chondroitin – these compounds are constituent building blocks of cartilage structure. It has been speculated that supplementation of these compounds in the diet may either slow the breakdown of cartilage in the osteoarthritic joint or permit some repair of cartilage. A recent high-quality prospective study failed to demonstrate a benefit to supplementation with these compounds in dogs with multiple joint OA ¹

5. REHAB THERAPY

Physiotherapy and hydrotherapy cannot reverse the osteoarthritic change that is present in a joint. However, they have been shown to have beneficial effects on joint and limb function. Passive stretching exercises have been shown to significantly improve range of motion of osteoarthritic joints. Hydrotherapy can help to improve muscle mass and strength and contribute to weight loss.

A NOTE ON LAMENESS

Arthritic animals are often lame, sometimes this is due to pain, sometimes due to the fact that the range of movement of their joints is very restricted. This second type of lameness may not be painful and we often have to accept that the animal will limp or have an unusual gait for a long time. However there is nothing to stop an arthritic animal becoming lame for another reason so any unusual change in the pattern of lameness should be reported to the Veterinary Surgeon in case it needs investigating.

The management of osteoarthritis is a day to day business. The condition can vary in severity and form from day to day depending on the weather, temperature, and many other factors which we do not understand. Just like the Medical Profession we have no “magic bullet” to cure osteoarthritis. We can only assess the severity of the condition and devise a long-term treatment plan. Such a plan is of course subject to change but basically will remain in force for the rest of the animals’ life. However, the daily chore of implementing such a plan on which any success depends falls to the individual owners. It is for this reason that we have produced this information as if you are going to carry out the majority of the treatment you should be well informed on the reasons for that treatment. Most owners become quite expert in manipulating their dogs’ diet and exercise, the fact that their dogs live a happy and moderately active life is mostly due to their effort and determination rather than any brilliant development in Veterinary medicine.

¹ Scott RM et al. Efficacy of an oral nutraceutical for the treatment of canine osteoarthritis. A double-blind, randomized, placebo-controlled prospective clinical trial. Vet Comp Ortho Traum 2017: 12;30(5): 318-323