

## Arthritis management at Vets@Woollahra

Proactive health management of our senior pets means they are living longer and healthier lives.

As our pets live longer, they become as susceptible to degenerative syndromes such as arthritis [degenerative joint disease: DJD] as we do. Most of us will eventually experience the discomfort and compromise that arthritis can impose on our quality of life. Dogs are particularly prone to arthritis due to breed characteristics and lifestyle/behavioural influences such as overenthusiastic, repetitive or inappropriate exercise which exacerbate stresses on joints.

As with human arthritis, the degenerative process can be managed in several ways. Our aim is to maintain your pet's quality of life and ability to exercise comfortably as long as possible. Treatment choices to achieve this include:

### **Non steroidal anti-inflammatory drugs [NSAIDs]:**

NSAIDs such as carprofen [Rimadyl/Norocarp/Prolet], meloxicam [Metacam], tolfenamic acid [Tolfedine], ferocixib [Previcox], deracoxib [Deramaxx] are anti-inflammatory agents used for pain relief. Side effects can include gastrointestinal upset and their metabolism by the body requires liver breakdown and kidney excretion. For this reason it is recommended that blood analysis of liver and kidney function is performed at the initiation of therapy. If longer term use is required for dogs with advanced DJD, regular monitoring is advised, especially in our elderly patients. Although we may sometimes use a single injection or a short course of NSAIDs as a screening test for arthritis, as many dogs will improve following administration, we aim to use these prescription drugs as little as possible, relying on them for short term relief when there has been over-exercise, trauma or exacerbation of symptoms.

### **Pentosan/Cartrophen:**

Pentosan and Cartrophen are both pentosan polysulfate sodium [PPS], a synthetic polyglycan product derived from beechwood. PPS stimulates the chondrocytes in joint cartilage to produce good quality glycosaminoglycans [GAGs] for cartilage health and joint fluid production. This makes the joint healthier and better lubricated and slows down the process of DJD. PPS also has an anti-inflammatory action, reduces the tendency for fibrin clots to form in the joint as part of the arthritic process and enables optimum blood supply to flow to the affected joints.

Pentosan/Cartrophen has none of the risks of NSAIDs and can actually slow down the arthritic process. It is a cornerstone for effective long term arthritis management. It is administered initially once weekly by injection for 4 weeks then as a regular booster dose 6 monthly, 3 monthly or monthly, depending on the individual's need. An oral capsule formulation, Sylvet, is also available for at-home administration in cases requiring more regular pentosan polysulfate.

### **Chondroitin and Glucosamine:**

The cartilage protective capabilities of chondroitin and glucosamine are well known in human arthritis and there are many different formulations of both products that produce varying efficacy in people. Marine extracts are also marketed for this purpose in pets [shark cartilage, green lipped mussel, Sasha's Blend, Technyflex etc]. These products are designed for long term use and will take 4-6 weeks to demonstrate their benefits.

The only chondroitin/glucosamine product proven safe and effective in veterinary clinical trials and registered with the APVMA [an assurance that the ingredients meet the label claim] is Cosequin DS, a capsule formulation administered daily in food. Its high molecular weight GAGs are much more bioavailable than that in green lipped mussel and therefore more easily absorbed. Cosequin also has a synergistic effect with pentosan injections: when used concurrently, a smaller dose of glucosamine/chondroitin is possible, making longer term treatment more cost effective.

Several treat formulations containing cartilage precursors or omega 3 fatty acids and sea minerals, such as Osteocare biscuits and SeaFlex treats are also marketed for joint health: while a useful treat and not harmful, they should be integrated as part of an overall management plan.

### **Hills j/d diet:**

Hills j/d prescription diet is the first complete nutritional approach to arthritis management. It utilises a unique and clinically proven level of the omega 3 fatty acid EPA which switches off the gene that causes cartilage degradation in the arthritic process. The particular balance of omega 3 and 6 fatty acids in the diet also provides anti-inflammatory benefits, along with glucosamine, chondroitin and antioxidants to protect the joint against free radicals produced by inflammation.

j/d also has a controlled energy content and added L-carnitine to help maintain an optimum body weight to avoid additional stress on joints.

It is a fully balanced food and must be given as a sole source of diet, as other foods dilute the optimum fatty acid levels. Other arthritis supplements containing omega 3 fatty acids such as Sasha's Blend and other marine extracts containing omega 3 fatty acids should not be given concurrently for the same reason.

Overweight dogs need to lose weight using Hills r/d diet until they are at their optimum body weight before commencing the j/d diet. As with all prescription diets, a gradual changeover of diet over several weeks is recommended. Improvement in mobility may be seen in 3-4 weeks.

Hills j/d is an excellent low maintenance form of long term arthritis management.

## **Weight loss, exercise and lifestyle management:**

These factors are essential to maximise mobility and muscle tone in the arthritic patient. Gentle regular walking pace exercise is all that is required to maintain muscle mass. Off lead exercise, running, ball chasing, frisbee catching etc all contribute to rotational and torsional pressures on joints which will undo the good work you've commenced with the above programs and increase reliance on NSAID drugs. We know how to follow our own physician's advice about managing exercise and lifestyle, but our pets do not: if they feel good they want to run. We need to provide the appropriate controlled exercise for them.

Swimming can be good, non load bearing exercise but must be in controlled circumstances to avoid overexcitement and inappropriate load-bearing.

Physiotherapy and massage are adjunctive therapies that may also assist and bond us with our pets.

## **Radiology:**

X-rays of affected joints will usually be recommended to confirm the presence of DJD, especially if longer term treatment with NSAIDs is required or if there is a poor response to initial therapy. Radiology will confirm the extent of joint disease and establishes a minimum data base of evidence to aid in the development of long term management. Bone cancers, periosteal inflammation and fractures can also be excluded. Some structural problems in younger dogs can be treated surgically if identified early enough. Hip replacement surgery can also be considered.

## **Alternative therapies:**

Acupuncture is currently the only complementary therapy most veterinarians recommend.

We can refer you to an appropriate practitioner as part of an integrated arthritis management plan or if this is your treatment preference.

Please feel free to contact us ask any questions you may have or to make an appointment to commence or review an arthritis management plan for your pet.