

Arthritis is a debilitating condition involving progressive degeneration and inflammation in one or more joints. It is very commonly seen in older dogs however can be seen from a young age in some individuals. It can happen in any dog but is predisposed by poor shape of joints (e.g. hip dysplasia), previous injury (e.g. cruciate rupture), genetics of certain breeds and obese body condition.

Arthritis starts with degeneration of the joint cartilage and progresses to remodeling of the bone around the joint which can be seen on x-ray. X-rays are not always required to start treatment but can be important to rule out other conditions presenting with pain and to assess the extent of bony change. We cannot reverse the degeneration associated with arthritis however there are many ways in which we can reduce pain, improve mobility and slow progression.

Supplements and Prescription Diets

- There is evidence that high levels of essential fatty acids (EFAs) especially omega-3s will reduce inflammation in joints and improve mobility.
- These can be delivered as supplements or in the form of a prescription diet. It is important to be aware that supplement quality varies massively (for both people and animals) so we recommend using Antinol or Synoquin as we can be certain these products are quality controlled.
- Diets which deliver a high level of omega-3 include Royal Canin Mobility, Hills J/D and Proplan Joint Mobility. These can be used as an alternative to supplements where there are no other dietary requirements.

Weight management

- Any additional weight above the ideal lean body mass increases the impact through unhealthy joints causing further damage. Weight loss to reach ideal body condition has an even greater benefit than medication as it is helping reduce the progression of disease.
- As dogs become arthritic they are often less active and this exacerbates weight gain. Additionally many breeds that are prone to arthritis are also prone to obesity.
- Calorie control is important because we are often unable to increase exercise to assist weight loss. This may require a prescription weight loss diet to ensure adequate nutrients while restricting calories. We encourage you to attend weight loss clinics with our nurses if you are struggling to manage your dog's weight.

Environmental Modification

- "More rugs less drugs" is a reminder from the Canine Arthritis Management group (see additional resources below) that making changes around the home can give an even greater benefit than medications.
- Little slips and trips around the house cause micro-trauma to the joints which will cause progression of arthritis over time. Reducing these will keep the joints healthier over time and minimise escalation of pain.

Things to consider are:

- Slippery floors tiles, wooden floors, laminate and decking especially where they are standing to eat/drink, regularly running/turning
- Stairs/steps these can lead to trips or slips
- Jumps into car or on/off furniture jumping up puts a lot of force through the hind legs and jumping down has a significant impact on the front legs – consider ramps or reducing the height of jumps required.
- Bedding ensure beds are padded, comfortable and easy to step on or off
- Please see the CAM Home assessment check list for more areas around the home to look at.

Exercise Modification

We understand that walking and playing with your dog is important for both you and them but moderating the type and intensity of exercise can make a massive difference to both day-to-day pain and progression of joint disease.

Types of exercise to avoid are those which encourage sudden acceleration/deceleration, twists and turns, jumping and landing. Ball throwing is the most common culprit for these movements but chasing rabbits, playing with other dogs, agility work and other toy play can also be an issue.

Moderating the level of activity in the early stages of arthritis can keep your dog enjoying an active lifestyle for far longer. Encourage more moderate behaviours such as walks with interesting areas for sniffing.

In more severely affected dogs, with very limited mobility, introducing new activities for mental stimulation can also be helpful and we have further information sheets to aid you with this.

It is well recognised that dogs with a strong drive to run and play will continue to do these activities despite it worsening their pain, and causing progression of their arthritis. This is even more true when we are appropriately managing their pain. We therefore need to be conscious to manage their activity levels rather than expecting them to self-regulate .

Physiotherapy/Hydrotherapy

Maintaining joint mobility is assisted by ensuring that the surrounding soft tissues are strengthened and functioning appropriately. Just as physiotherapy is routine in managing injuries in people it is equally important in dogs.

There are animal physio and hydrotherapy options in Christchurch including Animal Physio at Ferrymead. Therapeutic massage also appears to help some individuals.

Pain Management

Management of pain is incredibly important for your dog's quality of life. Any lameness, stiffness or reluctance to move is an indication of pain and should be managed appropriately. Dogs will not cry or yelp unless pain is extremely severe and most will continue to try and perform their normal activities such as walking up steps, jumping into cars and chasing toys despite pain.

Adequate pain management encourages appropriate mobility which maintains muscle function and keeps joints in better condition and reduces central sensitisation and wind up.

Wind up/central sensitisation occurs when chronic pain leads to amplification of the pain signals at the level of the spinal cord leading to increased experience of pain and the sensation of pain even in response to normal touch or movement. While we have specific medications to help with this in the later stages of disease (see below) it is best prevented by appropriate management of pain early on.

We have two main options for initial pain management:

1. Non-steroidal anti-inflammatories (NSAIDs) – these are medications such as Meloxicam, Rheumocam, Canidryl, Trocoxil which can come in tablet or liquid forms. They are effective pain management and can be used in the short or longer term. Monitoring of kidney and liver function is important with long term use as they may not be the best option in older dogs with other conditions. Some dogs will also develop gastrointestinal upsets on these medications which in rare cases can be serious.

2. Beransa – this is a monoclonal antibody which specifically targets receptors for pain mediators. This is a relatively new medication which is given as a monthly injection at the veterinary clinic. Because it is very specific in its action it has less risk of side effects and is a safer option in dogs with co-existing diseases or sensitivity to NSAIDs.

In more advanced arthritis we may need further medications to manage pain, especially if we suspect central sensitisation or any component of nerve pain. These may include gabapentin, amantadine, ketamine injections or other strong pain killers.

Additional resources

 \cdot Canine arthritis management have a website and Facebook group with additional resources for managing arthritic dogs – we can also provide a copy of their home management check list to help assess how you can make your home better for your dog

· Association of pet behavioural counsellors have an information sheet on modifying behaviour and environment which we can provide a copy of

· There is an animal physio at Ferrymead animalphysionz.com 03 420 2210