

OSTEOARTHRITIS & PAIN MANAGEMENT

Osteoarthritis (OA), also referred to as Degenerative Joint Disease (DJD), is a progressively worsening inflammation of the joint caused by the deterioration of cartilage. In a healthy joint, cartilage acts as a cushion to allow the joint to move smoothly through its full range of motion. In cases of osteoarthritis, this cartilage cushion begins to break down because of factors such as age, injury, repetitive stress, or disease. The loss of this protective cushion results in pain, inflammation, decreased range of motion, and the development of bone spurs. While any joint in the body can develop osteoarthritis, the condition most commonly affects the limbs and lower spine. OA is the most common type of canine arthritis, affecting 1 in 5 dogs in the United States. Approximately 20% of dogs over one year of age have OA. It is also the number one cause of lameness in canines.

TREATMENT

Treatment recommendations for OA are multimodal which means they include different approaches and can be combination of treatments - based on individual patients and in discussion with the animal owner and surgeon.

- **Diet & Weight Control** is by far the most critical aspect of OA management. Fat produces inflammatory mediators that perpetuate the inflammation process and increased body weight put additional force on the joints, causing pronounced OA changes and can ultimately be painful with limited mobility. We recommend you speak with our knowledgeable staff to discuss which diet would be most beneficial for your pet's specific needs. It is important to feed a diet that has been formulated for your pet's specific life stage (ie feed a senior diet for seniors, adult maintenance for adults, etc.). Specific blends of proteins, minerals, fatty acids, and supplements can be tailored to your pet. In general, we recommend that you feed a non-grain free diet from a brand that does extensive research on their food and employs a board-certified veterinary nutritionist, such as Hill's Science Diet, Royal Canin, Purina Pro Plan, or Eukanuba.
- **Activity modification:** High-impact activities such as running or jumping should be limited as they can cause more inflammation and pain. These activities should be replaced with more controlled activity like leash walks. Low impact consistent exercise is good to help build the muscles around the joints and will eventually promote joint stability.

BODY CONDITION

- Maintain lean muscle
- Facilitate weight loss when needed
- Being overweight adds additional stress to joints
- Fat cells release inflammatory cytokines that increase inflammation in the body
 - Body Condition Score (BCS) of 5/9 or 3/5 is ideal
- A 5/9 BCS pet's ribs cannot be seen but can easily be felt
 - A 5/9 BCS pet has a tummy tuck underneath & an hour glass figure when viewed from above

EXERCISE

- Little & often
- Low impact
- Prevents joints from becoming stiff
- Facilitates weight loss
- Increases blood flow
- Loose leash walking & swimming are great

ADEQUAN INJECTIONS

(polysulfated glycosaminoglycan, aka SGAG)

- Inhibits cartilage loss
- Restores joint lubrication
- Relieves inflammation
- Renews building blocks of healthy cartilage

- **Nonsteroidal anti-inflammatory drugs (NSAIDs)** are most the commonly used medications for OA pain and inflammatory control. There are many pet safe NSAIDs but not all are; make sure to consult with us before giving any. Common side effects can include (not limited to); vomiting, diarrhea, inappetence, ulcers, dark tarry stool. *If any of these symptoms are seen contact us.*

LASER THERAPY

A form of photobiomodulation (emits specific wavelength of light) that elicits photochemical & photobiological effects in the body. There is consensus that therapeutic doses of light to impaired or dysfunctional tissue leads to a cellular response that speeds healing, reduces pain & inflammation.

For more information visit

bit.ly/3KibVUS

ACUPUNCTURE

A form of eastern or integrative medicine. It employs the use of very small needles, placed into specific acupuncture points. This induces the release of neurochemicals such as endorphins to modulate and block the pain pathways.

REHABILITATION & PHYSICAL THERAPY

Can help mobilize joints, increase muscle strength, and increase stability.

Many exercises may be performed in the comfort of your own home.

- **Other Pain Control Medicines:** Sometimes steroids may be used at an anti-inflammatory dose instead of NSAIDs to help control pain and inflammation. NSAIDs and steroids are not to be given at the same time as this may lead to the formation of gastric ulcers. When a NSAID alone is not enough to relieve discomfort, then additional drugs may be added. Some of these drugs such as gabapentin, target a different pathway of pain recognition and response. Other drugs, like amantadine help to upregulate NSAID activity (enhancing its effectiveness). Opioids offer better control of more severe discomfort. However, they have potential side effects (most commonly, constipation and sedation). As with any drug the benefits must be weighted with the potential risks.

- **Supplements:** Not all supplements are made equal and are not well regulated; use a trusted brand. These brands have been extensively researched and shown to be beneficial.

- **Glucosamine & Chondroitin** facilitate joint health by inhibiting degradation of cartilage and stimulating the production of glycosaminoglycans (GAGs). GAGs are structural molecules that aid in joint health and function. These products come in soft chews, hard chews, and powders. (*Dasuquin, Cosequin, Glycoflex*).

- **Omega 3 Fish Oils** are fatty acids known for reducing inflammation in the body. When looking at an omega 3 supplement the level of eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA), the most important aspects. The level of these components should be added together to get the pet's daily dose. (*Eicosaderm, Welactin, Henry Schein Omega EFA*).

- **Assi Loop** offers pet owners the opportunity to continue healing their pet at home and to take a proactive role in their pet's recovery. In short, Assisi's targeted pulse electromagnetic field (PEMF) technology enhances the body's circling nitric oxide content. Nitric oxide has been proven to accelerate healing and reduce pain and inflammation in damaged tissue. www.assisianimalhealth.c

- **The Canine Icer** allows owners to systematically apply ice packs to the major joints and muscles of their pet. When used following an injury or operation, they can speed recovery by reducing swelling through a consistent and even application. www.canineicer.com