#### Let's Understand Osteoarthritis (OA)

Osteoarthritis, commonly known as degenerative joint disease (DJD), is a painful condition where the cartilage in a dog's joints gradually breaks down. While commonly thought of as an older dog issue, this is a condition that progresses slowly over time and is more often apparent as a patient gets older. OA can occur in any joint in the body—legs, spine, etc.—leading to pain, inflammation, and reduced mobility.

The cause of osteoarthritis varies. It might stem from previous trauma, like torn ligaments or hip/elbow dysplasia, or simply from the natural wear and tear that comes with age. In some cases, underlying infections or immune system problems can also contribute to joint inflammation. Regardless of the cause, OA tends to worsen over time, making joint care and management from a young age essential.

#### Signs Your Dog May Have Osteoarthritis

Osteoarthritis doesn't always show up with dramatic limping or lameness. Instead, many dogs exhibit subtle signs that might go unnoticed at first. You might notice your dog hesitates before jumping on furniture, or they are slowing down on walks. Some dogs may be less playful or reluctant to go up/down the stairs, and stiffness, especially after resting, is common.

Other clues could be:

- Difficulty getting up after lying down
- A change in posture, such as favoring one leg over another
- Reluctance to exercise or engage in activities they once enjoyed

As OA progresses, the affected joints may show signs of swelling, and your dog may experience muscle wasting or discomfort due to reduced movement. Some of this can be very subtle and can be easily missed.

During an examination, your veterinary team may be able to notice changes such as heat or swelling in joints, pain while doing a range of motion assessment, trigger points or muscle loss (atrophy). Further testing may be necessary based on exam findings such as imaging (typically radiographs) or joint fluid assessment.

As a younger dog, it can be beneficial to have a PennHIP test performed. This is a series of radiographs (x-rays) that helps assess for hip laxity, or how loose a hip is. The higher the score

on a PennHIP, the more likely that a dog will develop osteoarthritis in their lifetime, and the more important it is to consider a management plan from a young age.

### What Are Our Goals for Patients with Osteoarthritis?

Osteoarthritis is a chronic condition, but with the right combination of treatments, your dog can still enjoy an active and comfortable life. Treatment doesn't cure arthritis, but it can significantly improve mobility, reduce pain, better mood and prevent further deterioration of the joints. Our tailored treatment plan aims to see patients with:

- Increased activity levels, longer walks and more playtime
- Easier movement, such as jumping, climbing stairs, and getting up from rest
- An overall boost in quality of life for their dog

At Vets on Main, our goal is to help your dog feel as comfortable as possible so they can live life to the fullest, no matter their age.

# How We Can Help: A Holistic Approach to OA Treatment

At Vets on Main, we believe in addressing osteoarthritis from both a young age, and multiple angles to improve your dog's comfort and mobility. There are many tools to choose from and each can have its place in a tailored pain management plan. Here's what we recommend:

# 1. Focus on Healthy Weight Management

Carrying excess weight can put additional strain on your dog's joints, especially if they're already dealing with OA. Keeping your dog at a healthy weight is one of the most effective ways to ease the pressure on their joints. If your dog is overweight, we'll work with you to create a personalized weight loss plan, including tailored portion sizes and a recommended diet. Studies show that even a small amount of weight loss can greatly improve a dog's mobility and quality of life.

### 2. Nutritional Support with Omega-3 Fatty Acids

Omega-3 fatty acids, especially EPA and DHA, have proven anti-inflammatory effects that can help reduce joint pain. We may recommend supplements containing high-quality fish oil, rather than plant-based sources, to help support your dog's joint health. These oils also help keep your dog's coat shiny and healthy! The dose range for omegas is given based on the amount of EPA + DHA in the diet. This is different based on each product so be sure to read how many mg of EPA + DHA is in a product and not just how much 'fish oil' it contains. There are a number of ranges suggested from 50 – 220 mg/kg of body weight, over the course of a day. Generally around 200mg/kg per day of EPA and DHA is what is recommended for dogs with osteoarthritis. Be sure to speak with your veterinarian to confirm this dose is safe to use before starting.

Prescription diets like Hill's Metabolic and Mobility, Hills J/D or Purina J/M already include omega-3s at the appropriate levels. These can be an easy alternative to adding fish oil to a diet, especially if a patient is already overweight, or has a fat sensitive condition like pancreatitis. Since these diets are often appropriate for most adults, given the other potential benefits such as heart and kidney health, they can be great maintenance diets as well!

# 3. Cartrophen Injections for Cartilage Support

Cartrophen (pentosan polysulphate) is an injectable treatment that works wonders in repairing damaged joints. This medication promotes cartilage regeneration, improves the quality of joint fluid, and helps reduce inflammation. After an initial series of four weekly injections, your dog will continue with maintenance injections once monthly as a long-term treatment. Better yet, this is an injection we can teach you how to administer so you can manage this at home! This is an excellent option to help slow the progression of OA and provide relief for your dog and pairs well with other options like omega fatty acids.

# 4. Supplements: Undenatured Collagen Type II for Joint Health

Much like omega fatty acids, undenatured collagen type II (UC II) has strong evidence to show it is superior to traditional supplements like glucosamine and chondroitin. UC II helps to repair cartilage, maintain joint function and maintain flexibility in dogs with OA. Products like Flexadin Advanced (USA) or ProFlex UC+ Complete (Canada) are available options.

### 5. Pain Management with NSAIDs and Other Medications

For dogs with OA, pain management is a cornerstone of treatment due to its painful and inflammatory nature. Non-steroidal anti-inflammatory drugs (NSAIDs) are commonly prescribed to target both the inflammation and pain. Examples of these medications are meloxicam (Metacam) and deracoxib (Deramaxx) but there are many options on the market. These medications are highly effective but need to be used under careful supervision to avoid potential side effects, such as stomach ulcers or liver/kidney concerns. We'll closely monitor your dog's health to ensure they're on the safest and most effective dosage.

In some cases, we may recommend additional pain relievers like gabapentin, pregabalin or amantadine, which can be combined with NSAIDs for more comprehensive pain control. This would be prescribed based on your conversation with your veterinarian as part of a customized pain management plan.

A new injectable product, called Librela, is designed to treat the pain of osteoarthritis as well. While this can be a useful tool to help manage the pain of OA, it does nothing for the underlying cause and caution must be taken. Anecdotally, some dogs feel so much better than they overdo it, and it can lead to them feeling more sore in the long run. There are also some adverse effects, such as neurological signs, that can be seen so it is important to have a full discussion with your veterinarian to see whether this is an appropriate option for your pet.

# 6. Rehabilitation Therapy to Strengthen Muscles and Improve Mobility

A fantastic modality to use to enhance your dog's mobility and comfort is rehabilitation therapy (aka: rehab). Vets on Main can help guide you through basic rehabilitation exercises to strengthen and improve flexibility, based on his exam findings. Options like underwater treadmills, acupuncture, fascial manipulation, and shockwave therapy are great modalities to consider and we can facilitate referral to other facilities for more advanced rehabilitation treatment.

# 7. Laser Therapy to Relieve Pain

Low-level laser therapy (LLLT) is a non-invasive treatment that helps reduce pain, inflammation, and improves the healing of damaged tissue. It's especially helpful for soothing the muscle pain that often accompanies arthritis. This can be a great option where patients have other underlying health issues such as kidney disease, where NSAIDs are contraindicated, to offer relief.

# Your Next Steps

If you've noticed signs of arthritis in your dog or if they've already been diagnosed with OA, we're here to help. Together, we'll create a personalized treatment plan that targets your dog's specific needs. Don't hesitate to reach out with any questions or concerns—you don't have to navigate this journey alone!

Let's work together to help your dog feel better and enjoy their life, pain-free.

This guide reflects our holistic approach to managing osteoarthritis in dogs, with a focus on comfort, quality of life, and long-term wellness. At Vets on Main, we are here to help every step of the way.