



FUSION VETERINARY ORTHOPEDICS

Osteoarthritis

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Introduction:

Osteoarthritis (OA) is a debilitating progressive disease that causes cartilage destruction and ultimately failure of a joint leading to pain and disuse. **It is important to realize that OA is not an old dog or cat disease, it is a problem of dogs and cats from the very young to the very old.** OA is the #1 source of chronic pain in our furry friends, so it is important that we recognize the problem and aggressively manage it.

Our goal should be to take a pro-active approach to OA; in particular in the dog. Dr. Dycus at Fusion Veterinary Orthopedics will utilize and can consult with your regular veterinarians on using the COAST form (Canine OsteoArthritis Staging Tool) to help with recognizing at risk patients well before the onset of clinical signs or changes noted on radiographs (X-rays).

We suspect that the disease process of OA follows an “ebb and flow” type pattern. This means our furry friends can have osteoarthritis and seem clinically fine followed by periods of flare-ups where they have osteoarthritis and are clinically affected.

Clinical Signs and Diagnosis:

The clinical signs of OA can vary pending the severity of the condition and the joint affected. For example, dogs tend to have greater lameness and difficulty with elbow related problems compared to shoulder or hip related problems. In the young skeletally immature dog, the clinical signs of a joint problem could be stiffness when rising or after play, self-limiting during play, lack of enthusiasm to go on walks or socialize; while in the older skeletally mature dog the clinical signs may be stiffness/soreness when rising or after heavy play, an intermittent to continuous limp, a change in behavior such as a lack of wanting to go on walks or lagging behind during walks, or even a change in activity such as the inability to get onto or off furniture or go up/down stairs.

If you suspect your dog or cat who is either young or older is having a joint related problem the first step is seeing your regular veterinarian or Fusion Veterinary Orthopedics. From there an initial examination may reveal changes consistent with a joint problem and in many situations radiographs (X-rays) or a CT scan will be performed.

Once a diagnosis of a joint problem has been delivered or a previously diagnosed joint problem is now becoming more frequent your veterinarian may recommend a



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consultation with a Board-Certified Surgeon such as Dr. David Dycus. Alternatively, you may elect to seek out and schedule a consultation with a Board-Certified Surgeon with a particular expertise on joint problems such as Dr. David Dycus at Fusion Veterinary Orthopedics. During the consultation with Dr. Dycus he will perform a thorough orthopedic examination to determine the joint affected and the degree of discomfort. From there additional radiographs or even advanced imaging such as a CT scan may be recommended.

If your pet has previously been diagnosed with OA, determining if a flare-up is present or coming on is important. Therefore, we recommend the “popsicle stick method” or “marble method” of keeping track. This is completed by getting green, yellow, and red popsicle sticks or marbles and 3 jars. Each day based on how your pet is doing is assigned a popsicle stick or marble. For good days this is a green popsicle stick or marble placed in the jar, while for “so-so” days (or you forgot) a yellow is assigned and for bad days a red popsicle stick or marble is assigned and placed in a jar. Once the yellow or red popsicle sticks or marbles outnumber the green this could indicate a flare-up and would warrant a recheck with either your veterinarian, Dr. David Dycus, or our rehabilitation team at Fusion Veterinary Orthopedics.

Management Strategies:

Basic osteoarthritis management consists of joint supplements (Dasuquin Advanced, Antinol plus, and Flexidin Advanced) omega-3 fatty acids (Welactin 3TA), Adequan injections, daily exercise through controlled leash walking, daily play time (with avoidance of high impact activities), and weight control.

If at any point your pet experiences a flare-up the goal will be to determine what can be done to get the flare-up under control so that he/she may resume back to his/her status quo. Potential management strategies include joint injections (please see below), formal rehabilitation (please see below), and pharmaceutical management (anti-inflammatories for 1-4 months, gabapentin, amantadine, etc.).

Our goal is to only use pharmaceutical management intermittently. There will likely come a time in the future when your pet may benefit from daily pharmaceutical management, such as a daily anti-inflammatory.

At Fusion Veterinary Orthopedics, we may recommend intra-articular injections (Hyaluronan, platelet rich plasma, cortisone, or synthetics) to help improve comfort in the painful joints.

Hyaluronan (HA) is a joint protective agent, which can decrease inflammation within the joint. Specifically, it increases the joint fluid viscosity, increases cartilage



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(GAG) formation, and decreases degradative enzymes and cytokines (which cause inflammation/synovitis). This medication is commonly used for the treatment of osteoarthritis in humans, horses, and dogs. The injections may be given under sedation weekly for 3 weeks. Eighty percent of dogs respond well to the HA injections, 10% respond fair, and 10% do not respond at all. For those that do not respond, we may recommend a series of injections of either platelet rich plasma or corticosteroid (Triamcinolone) injection in the joints.

Platelet rich plasma (PRP) injections are another option for management of osteoarthritis to act as more of a “clean anti-inflammatory.” Blood would be collected and processed in our biologic medicine laboratory to collect the platelets. The platelets in PRP have a high concentration of growth factors that promote diminishing the inflammatory response. Following PRP injections some patients may experience a “PRP flare” that can last 24-72 hours. A “PRP flare” will result in worsening lameness; however, some consider this to be a “good inflammatory” response associated with positive effects of the PRP. At Fusion Veterinary Orthopedics, typically PRP is provided in conjunction with shockwave therapy with 3 treatments each separated by 2 weeks.

If formal rehabilitation therapy is recommended it will help to speed recovery by decreasing inflammation and swelling, building muscle mass, increasing range of motion, and improving overall comfort. We have a complete rehabilitation service at Fusion Veterinary Orthopedics; however, if the drive is too far other locations can be used. To help locate a certified rehabilitation therapist in your area please visit the NC State’s rehabilitation certification website (<https://www.ncsuvetce.com/canine-rehab-ccrp/ccrp-practitioners/>) or visit the Canine Rehabilitation Institute’s website (<http://www.caninerehabinstitute.com>).

As previously noted, there is no “cure” for osteoarthritis; however, it is a life-long management commitment. The treatment of osteoarthritis is a multi-modal approach including weight management, exercise, oral joint supplements, intra-articular products as needed and appropriate pain management as needed. Your pet’s long term osteoarthritis management will be through a team approach with Fusion Veterinary Orthopedics and your regular veterinarian. To learn more about the management of osteoarthritis please visit www.caninearthritis.org.



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