

## Musculoskeletal Disorders

# EARLY DIAGNOSIS AND INTERVENTION BENEFIT CANINE OSTEOARTHRITIS PATIENTS



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- Q. Over the past several decades, we've made significant strides in both our understanding of canine osteoarthritis (OA) and how to diagnose it earlier. Why is this important?
- **A.** Early identification is important for every patient, both young and old. We know that the main risk factors for OA include obesity, orthopedic disease, orthopedic injury, age, gender, diet and genetics.<sup>1</sup> Early and prompt identification of the conditions and events that impact joint health throughout life allows us to minimize the effects of OA in patients.

Recently there has been a strong emphasis on identifying OA and initiating therapies earlier. This approach is supported by the results of the Purina Life Span study.<sup>2</sup> In this 14-year study, lifelong dietary restriction not only extended dogs' healthy years by a median of 1.8 years, but also delayed the need for long-term treatment of chronic conditions such as OA.

### Q. What criteria should practitioners use to identify dogs at risk?

**A.** Veterinarians have a number of screening tools (e.g., Canine Brief Pain Inventory [CBPI], Cincinnati Orthopedic Disability Index [CODI], Canine Osteoarthritis Staging Tool [COAST]) to choose from when evaluating canine patients, and I'm encouraged to see their use gaining momentum. However, what's more important than choosing one tool over another is using the preferred tool at every exam for every patient.

The benefit of the metrics revealed through OA screening is the ability to evaluate the progression of OA in a patient over time. Many dog owners don't notice the onset of lameness in their pets, so the ability to show a client that a dog's OA score has changed since the last exam is invaluable. Generating these metrics can make the veterinarian-client discussion more productive and also helps practitioners decide when to start or adjust therapies.

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#### Q. What strategies should be considered in early OA intervention?

**A.** Weight loss and management are always my first priority for dogs with OA. Studies have shown that even small reductions in weight can result in significant changes in OA-related lameness.<sup>3,4</sup> In addition to reducing the impact of excess weight on joints, it has been shown that weight loss can decrease chronic inflammation in dogs, but the clinical implications are not well understood.<sup>5</sup>

Exercise is closely linked to weight management and is important for patients with OA.<sup>6</sup> Increasing activity can help speed weight loss and build the muscle mass so critical for proper joint support.

Proper nutrition can facilitate weight loss and support joint health. When a patient with OA is in good body condition at the time of diagnosis, I recommend feeding a diet formulated to support joint health. If weight is a significant problem, I recommend starting the patient on a diet formulated for weight management, then transitioning to weight maintenance on a joint-support formula.

NSAID therapy may need to be introduced early if the patient's pain is significant enough to hinder exercise. Joint supplements can be helpful, but practitioners should choose those with proven efficacy. Additionally, orthopedic surgery may be warranted in dogs that do not respond to medical management or with conditions such as cruciate tears and severe hip dysplasia.

Today veterinarians have more evaluation tools and therapeutic options than ever before to help us improve the lives of dogs with OA. Through early diagnosis and intervention, we can make a real difference in the quality of life for the many patients suffering from this progressive condition.

#### References

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- 4. Marshall WG, Hazewinkel HAW, Mullen D, et al. The effect of weight loss on lameness in obese dogs with osteoarthritis. *Vet Res Comm.* 2010;34:241-253.
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The Purina Institute aims to help put nutrition at the forefront of pet health discussions by providing user-friendly, science-based information that helps pets live longer, healthier lives.

