

## ***Ask the Vet:* Many Causes for Lameness Exist in Pets**

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Veterinarians see and treat a wide variety of ailments, from the simple to the complex, from parasites and infections, to cardiac and neurologic disorders. We are also regularly asked to evaluate an animal's lameness, probably more frequently in companion animals and horses, but any animal with legs may succumb to lameness.

Concerned pet owners often ask what they can give a pet at home for lameness without any evaluation. Simply put, if you are concerned enough that you feel you need to give a medicine, then have your pet evaluated by your veterinarian. Please remember, do not give Tylenol, aspirin or ibuprofen to your pets - these can be very irritating to the GI tract, and can be fatal to cats and ferrets. I have seen a dog die from severe stomach ulceration and uncontrollable bleeding after given an unsafe medication. Safer medicines are available, if deemed necessary, after a proper diagnosis is made.

A proper lameness evaluation starts with a full physical exam including an orthopedic assessment. Some lamenesses may not have a specific origin in the affected leg, as when if there is underlying neurologic disease or systemic inflammation. For this reason, the physical exam is always an integral part of helping to determine the cause.

During the exam, the legs are checked for any specific sites of pain, for any swellings including in and around the joints, and for normal anatomic structure. Your pet may also be observed at a walk or trot if possible. This is especially helpful if the lameness is subtle or if the lameness changes with change in pace. The range of motion of any involved joints will also be considered, as well as any clicks or crepitus present in the joints. Chronic inflammation and arthritis commonly results in restrictions in joint motion and some decrease in limb function. Neurologic function and neighboring muscle structures should also be evaluated.

Along with the orthopedic examination, x-ray imaging is helpful to more fully understand the underlying bone and joint structure. This is especially true when fractures, conformation abnormalities, bone cancer, or osteoarthritis is suspected. To obtain the best diagnostic images, sedation is often utilized to decrease nervousness and provide calming.

Other diagnostics are occasionally needed, including blood tests, joint fluid analysis, or biopsies when an infectious, metabolic, or immune-related cause is suspected.

To help narrow the myriad of possible causes, it is important to know whether the lameness had an acute onset, or is of a more chronic nature. The more acute causes of lameness can include fractures and dislocations, torn ligaments, and trauma or penetrating injuries. Some simpler soft-tissue injuries and sprains are also frequently seen – and generally carry a better prognosis. Lamenesses that are more chronic in nature carry a higher risk of developing structural changes, such as osteoarthritis, that can lead to a poorer prognosis in recovery. The point is, when lameness exists, the sooner a proper diagnosis can be made the sooner treatment can be started and comfort provided.

The age of the animal plays a big role in both the possible causes and the potential for healing and recovery. In the younger animal, inherited or developmental bone and joint diseases must always be considered. The young are also typically much more active and are often more prone to injuries from rough and over exuberant play. When a leg joint is injured, the resulting instability results in cartilage damage and osteoarthritis which restricts range of motion. Some lamenesses develop because the bones and muscles are growing asynchronously which causes pain. Seeking treatment in a timely fashion helps to minimize or eliminate complications later in life.

Joint degeneration and osteoarthritis is most commonly seen in the older patients. Veterinarians frequently treat the older patient with appropriate pain and anti-inflammatory medications, as well as recommending the use of joint supplements to help improve joint structural health. There are a variety of supplements available that have been shown to improve joint health, including easy to give tablets and powders, and specially formulated diets. Supplement quality and quantity is quite variable, so please don't hesitate to ask for advice. Management of this process to minimize its negative effect on quality of life is multimodal. Weight control, appropriate exercise to maximize muscle mass, and use of effective diet, anti-inflammatory medication, and supplements has proven to be effective.

According to a 2014 survey by the Association for Pet Obesity Prevention, 53% of dogs and 58% of cats in America are overweight or obese. The increased weight and subsequent work load on the body is detrimental over time to healthy bones and joints. Several previous *Ask the Vet* articles here have discussed pet obesity and the long-term complications that exist. Maintaining normal weight and excellent physical fitness is the best way to prevent lameness, heal quickly from a cause of lameness, and reduce all health care expenses. Your veterinary team knows this and can help you reach this goal.