

The Limping Mastiff

(Or When to Take Your Dog to the Veterinarian)

By Robin M. Smith, DVM

One of the main areas I get call regarding mastiffs is in the orthopedic department. The pups are growing just fine and then they start to limp. People want to know when they need to be concerned enough to take the dog to the veterinarian. I cannot say I have a magical time to take your dog to the veterinarian but I can try and describe some common problems with Mastiff puppies that I think all should be aware of as conditions that can affect your mastiffs.

Developmental orthopedic conditions are a common cause of lameness in our Mastiff puppies, unfortunately. Many of the cases have actually been present for several weeks, but the signs have just been so subtle. There are familial, nutritional and inherited components to many of these conditions. In the following paragraphs, I will try to explain some of these conditions to you and when you need to see the doctor.

Osteochondrosis

Osteochondrosis is a developmental orthopedic condition in which a disturbance in the normal process of bone development results in thickening or retention of the articular cartilage on the end of the bone. The long bones are the most frequently affected. This thickened cartilage is prone to breaking off and if a cartilage flap develops, inflammation and degenerative joint disease may result and this condition is what is referred to as Osteochondritis dissecans.

Osteochondritis dissecans (OCD) occurs most frequently in rapidly growing, male, large and giant breed dogs. Genetic, nutritional, hormonal, and traumatic factors have all been implicated in the process. The most common sites of occurrence are the hock, stifle, elbow and shoulder joint.

In the hock, affected animals often develop clinical lameness by four or five months old. Most dogs display consistent weight-bearing lameness or intermittent non-weight bearing lameness. The affected hock can be swollen and painful. The diagnosis can be made by radiographing the joint.

In the stifle, OCD occurs infrequently. The affected dogs may become lame as early as three months of age.

In the elbow, there are three conditions that can occur: ununited anconeal process, osteochondrosis, and fragmented coronoid process.

In the shoulder joint, the story is a little different. Dogs usually do not show clinical lameness until six months of age or older. They may initially have mild, intermittent weight-bearing lameness but can progress to intermittent non-weight bearing lameness. In severely affected dogs, the shoulder muscles will atrophy. Movement of the shoulder joint can be very painful.

The diagnosis of OCD is confirmed by radiographs. There are certain locations of the various bones where these lesions are seen; therefore the veterinarian has to be familiar with the correct positioning of the dog to be sure to see the lesions. Once diagnosed, surgery can correct the problem or at least alleviate the pain involved.

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The most common question I get about OCD is if it is inherited. As stated before, this disease is multifactorial, being due to nutrition, trauma, and hereditary causes. There is only one European paper in the literature that supports OCD being totally hereditary. Most other sources may suggest it is hereditary but cannot document for sure.

Panosteitis

Panosteitis is an acquired inflammatory condition of unknown cause that affects the long bones of large and giant breed dogs. It affects males more than females, is often cyclic or recurrent, and typically it is a shifting leg lameness. Lameness may be accompanied by lethargy, fever, and loss of appetite. Pain is elicited when pressure is applied to the affected region. This condition can also be diagnosed by radiology. It shows up as a hazy appearance on the inside of the bones.

Most of the time, all that is needed to get the dog through this condition is strict confinement and aspirin therapy twice a day. The dog WILL outgrow this.

Hypertrophic Osteodystrophy

This is a developmental disease of unknown cause that primarily affects young, rapidly growing large and giant breed dogs. A genetic basis for the disease has not been established.

Clinical signs may develop between two months of age and the time of growth plate closure but typically manifest between two and four months of age.

This condition is easily diagnosed by radiology.

Ununited Anconeal Process

UAP occurs in large and giant breed dogs. The clinical abnormalities result from progressive degenerative joint disease. Affected animals may exhibit lameness as early as four months. The lameness is intermittent and may be exacerbated by exercise or prolonged rest. Affected dogs may sit or stand with the carpus (wrist) in a valgus position (bowing outward).

The diagnosis is confirmed by radiology. The fusion of the anconeal process may not be done until 16 - 24 weeks of age, so a diagnosis of UAP should not be made before 24 weeks of age.

Fragmented Coronoid Process

This condition affects the large and giant breed dogs also. The cause of the condition is still controversial. A hereditary basis for this condition has been suggested.

Clinical signs are rarely noted before five months of age. They will develop. There will be lameness that is made worse by exercise or prolonged rest.

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A fragmented coronoid process is rarely identified radiographically because of the superimposition of the opposite coronoid process.

Hip Dysplasia

Hip dysplasia is the most common developmental orthopedic condition that affects dogs. It is influenced by genetics, environmental and hormonal factors.

Some dogs may have an acute onset of hind limb and hip pain, but most dogs have more subtle clinical signs.

I am a proponent of nutrition being one of the causative factors of these disorders. I am a strong advocate of getting your puppy off the puppy food onto an adult dog food IF they are having problems, but not before. Another factor that is important is the flooring these puppies are on when young. It should be a good floor, which allows the dogs to have good footing.

So, now what? What do I do if my puppy starts to limp? You need to ask yourself various questions, i.e. Has your pup been excessively exercising? If the answer is no... read on. If the limping just started, make sure to examine the foot of the dog to make sure there are no needles or burrs in it. I recommend confining the dogs for 2 weeks and leash walk only. I also suggest aspirin 325 mg. (5 grain) for the inflammation.

If after two weeks, the limp is still there, or if after a few days of confinement, the limping is worse, I recommend seeing a veterinarian. Don't wait more than two weeks. All of our puppies can overdo and hurt themselves very easily, so allow them time to get over an injury that could have occurred, but **DO NOT WAIT TOO LONG**

I also will tell you to get the puppies off the puppy food or any high protein food or any vitamins. These puppies are growing very rapidly and we can slow this process down slightly. I recommend putting them on 21-23% adult food. And again, make sure the pups have good flooring for stability.

As you can see, unfortunately, because we love giant breed dogs, we must be very aware of these orthopedic conditions because we can try to alleviate some of the complications associated with these conditions.