Arthritis (Degenerative Joint Disease, Osteoarthritis)

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Depending upon whom you talk to, the terms 'arthritis,' 'osteoarthritis' and 'degenerative joint disease' may or may not be used to describe the same thing. In this discussion, we will use the terms interchangeably.

What is degenerative joint disease (DJD)?

Degenerative joint disease is characterized by the loss of the smooth cartilage that covers and protects the end of the bones in a movable (synovial) joint. The cartilage has no nerves so when it touches the cartilage of another bone, there is no pain. When the cartilage wears away, the bone is exposed. The bone does have nerves so when the two bone ends in a joint touch each other it results in pain and inflammation - signals that arthritis is present. In degenerative joint disease we also see small bony projections (osteophytes) form on the bone that is close to the joint. This adds to the pain. This type of arthritis is progressive, meaning it continues to get worse.

What causes degenerative joint disease?

Degenerative joint disease can occur as a result of wear and tear on an otherwise normal joint and occurs as the dog ages. This is called primary degenerative joint disease. Osteoarthritis may also occur as a result of another condition affecting the joint such as hip dysplasia or elbow dysplasia. Then it is called secondary degenerative joint disease.

Which dogs are at risk of developing degenerative joint disease?

Certainly any dog with a congenital joint problem, like dysplasia or patella luxation is going to be more prone to developing degenerative joint disease. Dogs who have had injury to a joint such as a fracture involving the joint, or a ruptured anterior cruciate ligament in the knee will be more likely to develop arthritis.

What are the symptoms of degenerative joint disease?

The symptoms of arthritis will vary as to which joints are involved, the age of the dog, and the severity of the disease. In general, the first symptoms may be an altered gait since the dog will try to put more of his weight on the unaffected limbs. There may be muscle atrophy (reduction in the size of the muscle) in the affected limb because the dog is using it less, or at least putting less weight on it. For instance, in a dog with hip dysplasia involving both hind limbs, the muscles of the hind limbs may be thin, whereas, the muscles of the chest and shoulders may be increased in size because the dog is putting more weight on the front legs.

Many times the dog may find it difficult to get up after lying down and appears stiff. The dog may be unable to jump up into the car. Many dogs with DJD find it difficult to go up or down stairs.

Depending upon the amount of pain the dog is experiencing, there may be changes in appetite and behavior (e.g., the dog may go off by himself more often). The joints are generally not swollen and the pain is the dull aching type, so dogs do not often vocalize or cry out in pain. Some dogs will lick or bite at the area that is painful. Some will seek out warmth or soft places to sleep.

How is degenerative joint disease diagnosed?

The veterinarian will obtain a good history of the dog's signs from the owner and perform a complete physical exam. Radiographs (x-rays) are taken, and further laboratory tests or more detailed exams of the affected joint(s) may be performed.

How is degenerative joint disease treated?

Degenerative joint disease can be treated medically and surgically.

Some forms of degenerative joint disease can be treated with surgery. For example, hip replacements in dogs with hip dysplasia are becoming more common. Other procedures can also be performed but their success rests upon how many bony changes have occurred in and around the joint. Please see the article on the specific joint disease for extended discussion on the surgical treatment options for that disease.

For an extensive discussion on the medical management of arthritis in dogs, please see Causes and Management of Arthritis and Other Joint Diseases in Dogs.

What is the prognosis for dogs with degenerative joint disease?

Degenerative joint disease is progressive - it will continue to worsen. There are ways we can medically treat the disease to slow down the progression and many dogs respond well and can live comfortably for years. In more severe cases, surgery may be performed including actual joint replacements. In these cases, the recovery is usually very good.

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