

Introduction

Osteochondrosis is a developmental abnormality of the articular cartilage (cartilage of the surface of the joint) of puppies leading to sites where the cartilage is thicker than normal (figure A). There is a localized separation of this abnormal articular cartilage from the underlying bone. This can lead to the formation of a cartilage flap, known as Osteochondritis Dissecans (OCD) (figure B).

The condition can be present in more than one joint even though the patient appears lame in only one leg. Thus, radiographs of other joints may be necessary. The most common joints affected are the shoulder, the elbow, the stifle (knee) and the hock (ankle).

This condition is usually seen in fast growing, large breed puppies although it can be seen in some families of smaller dogs. Overfeeding high protein / high calorie diets and over supplementing with vitamins and minerals, especially calcium, can worsen or accelerate its development in fast growing puppies. Although the OCD flap may occur as a result of a minor trauma, the underlying osteochondrosis may be hereditary and passed on to offspring.

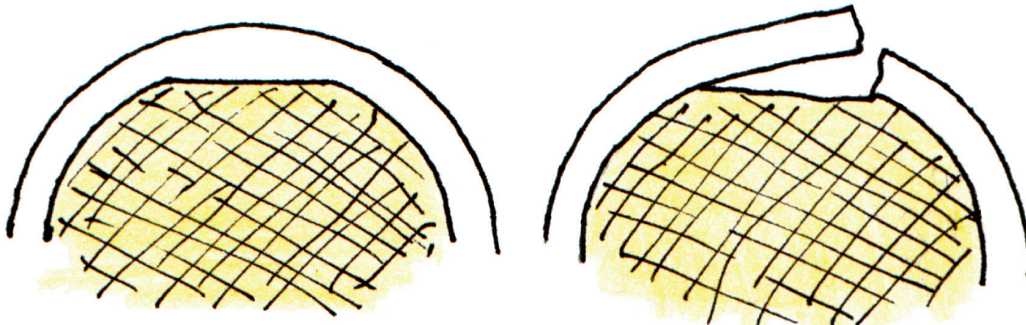


figure A

figure B

Treatment

The flap and any free-floating fragments cause pain and inflammation. Surgical removal of the flap will help to eliminate this pain. Scar tissue (fibrous tissue) will fill in the defect. Fibrocartilage will grow into this area within about three weeks. With appropriate home care after surgery, this fibrocartilage may be partially replaced with a more normal and durable articular cartilage (hyaline cartilage) by eight weeks.

Thus, strict rest is necessary during this entire healing period. Despite even early diagnosis and early surgical removal, some irreversible damage may have already occurred making osteoarthritis inevitable. The ultimate goal of the surgery is to relieve pain and to minimize the severity of the osteoarthritis that may develop. A seroma (fluid accumulation) is the most common short term complication. It occurs because of overactivity, thus strict control of activity is imperative for the full eight weeks after surgery. Patients must be kept confined to a small area and walked on a leash only. VMSG