Osteochondritis Dissecans (OCD)

Osteochondritis dissecans, commonly known as OCD, is a disease of the cartilage that can affect various joints in a dog. In a dog with OCD, joint cartilage is damaged or grows abnormally. Instead of being attached to the bone it covers, it separates or cracks. A loose flap of cartilage may form, or an entire piece may break loose. The damage to the cartilage leads to the development of degeneration of the joint and osteoarthritis.

OCD is primarily a problem in large or giant breed dogs. It has been reported in small dogs and cats, though it is not very common. It generally occurs when the animal is between 4 and 10 months of age, though it can show up in older dogs.

OCD may affect the shoulder, elbow, knee or hock, although the elbow is most commonly affected. The symptoms are lameness in the affected limb. Some dogs have a barely noticeable limp and others are unable to bear any weight on the leg. The lameness tends to worsen after periods of exercise and improves after rest. When the condition has resulted in the early development of joint arthritis, stiffness on rising is commonly seen. Occasionally, the disease will affect both limbs simultaneously and the dog may be reluctant to move.

Diagnosis is based on history, physical exam, and radiographs (x-rays). On physical exam, we notice joint pain. As the disease progresses loss in the joint’s range of motion will also become apparent. During the physical examination flexion and extension of the shoulder joint may worsen the lameness.

Radiographs of the affected joint are taken to confirm the diagnosis. The dog is often sedated or anaesthetised so that full relaxation of the joint can be obtained. Several views of the affected joint and the healthy joint on the other side are taken for comparison. A change of the bone underneath the damaged cartilage is often visible. If the radiographs are not confirmatory but OCD is still suspected, radiographs may be taken again in 2 to 3 weeks.
There are currently two ways to treat OCD, conservative medical treatment or surgical removal of the lesion. Conservative treatment may be indicated for dogs that have early or only mild symptoms of OCD. Conservative treatment consists of restricted activity for 4 to 6 weeks. Lead walking is permitted but no running or playing is allowed. Anti-inflammatories and painkillers such as carprofen (Rimadyl) or meloxicam (Metacam) may be indicated. In addition, the use of joint supplements such as glucosamine/chondroitin products is highly recommended. Conservative treatment may be difficult in young, active puppies who may still need to undergo surgery, if the symptoms do not improve.

Surgery is indicated in animals that show severe symptoms, in cases where large lesions are identified on radiographs or when conservative treatments fail. The surgery is very straightforward. The affected joint is opened and the offending flap, defect, or joint mouse is removed. The joint surface is inspected and cleaned before the approach is closed. The prognosis is generally good when the shoulder joint is affected but with other joints, degenerative joint disease (osteoarthritis) will be more likely to become a later issue.