

What is osteochondritis dissecans?

Osteochondritis dissecans (OCD) is an abnormality in the development of bone from cartilage. As a result, within joints such as the shoulder, elbow, knee, and hock (ankle), a flap of cartilage can develop causing lameness. The shoulder and elbow are more commonly affected. The development of OCD is secondary to multiple factors, including diet, growth rate, genetics, trauma, hormonal imbalance, and joint architecture.

As genetics play an important role in the development of OCD, any patient diagnosed with this condition should not be bred. In addition, parents, siblings, or previous offspring of an affected patient should not be bred.

Which pets are most commonly affected?

Osteochondritis dissecans (OCD) frequently occurs more in large and giant breeds. Most commonly affected breeds include Labrador Retrievers, Golden Retrievers, and Newfoundlands, as well as Bernese Mountain Dogs, Chow Chows, German Shepherds, Mastiffs, Old English Sheepdogs, Rottweilers, and Standard Poodles.

In cases such as OCD of the shoulder, male dogs are more commonly affected than female dogs.

How is it diagnosed?

Most dogs will start showing clinical signs as young as 4 to 7 months of age. Most are recognized to have a lameness that becomes worse with heavy exercise and after prolonged rest. In some cases, no obvious affected leg can be determined, as osteochondritis dissecans is in both limbs.

X-Rays are often diagnostic, but in more difficult cases other tests, including arthrography (X-Rays with contrast within the joint), CT scan, or MRI, may be used.

What is the treatment and prognosis?

Surgery or arthroscopy will often be the treatment of choice for osteochondritis dissecans. Factors that may affect this decision include the joint affected, the degree of secondary arthritis, or if a flap of cartilage is not present. The goal of surgery is to retrieve the flap of unhealthy cartilage and prepare the area where the flap developed to allow a scar-type cartilage (fibrocartilage) to develop.

In the shoulder: Surgery or arthroscopy is the treatment of choice. Seventy five percent of patients will show no signs of lameness after surgery, 23 percent show mild lameness, and 2 percent show persistent lameness.

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In the stifle (knee): Surgery is indicated if a large fragment is recognized. Chances for complete resolution of lameness are small.

In the tarsus (ankle): Most dogs will show mild improvement in lameness immediately following surgery but will continue to show some gait abnormalities once they have returned back to normal activity levels.

What is the post-operative care?

Following surgery, patients should be restricted to leash confinement for a minimum of four weeks. Over the next four weeks, controlled activity may be gradually increased. Pain management with non-steroidal anti-inflammatory drugs will usually continue for the first four to seven days after surgery. Long-term management, whether surgery was performed or not, includes weight restriction, controlled exercise, and pain management as needed.