

## Osteochondritis Dissecans (OCD) in Horses

Associated Terms:  
OCD



The term "ACVS Diplomate" refers to a veterinarian who has been board certified in veterinary surgery. Only veterinarians who have successfully completed the certification requirements of the ACVS are Diplomates of the American College of Veterinary Surgeons and have earned the right to be called specialists in veterinary surgery.

Your ACVS board-certified veterinary surgeon completed a three-year residency program, met specific training and caseload requirements, performed research and had research published. This process was supervised by ACVS Diplomates, ensuring consistency in training and adherence to high standards. After completing the residency program, the individual passed a rigorous examination. Only then did your veterinary surgeon earn the title of ACVS Diplomate.

### Overview:

Osteochondritis dissecans (OCD) is a relatively **common developmental disease** that affects the cartilage and bone in the joints of horses. It causes clinical signs of disease in 5-25% of all horses and **can occur in all horse breeds**. Cartilage in joints with OCD doesn't form normally; this causes the cartilage and bone underneath it to become irregular in thickness and weaker than in normal joints. This can cause the development of cartilage and bone flaps that can either remain partially attached to the bone or break off and float around in the joint. These loose flaps and areas of abnormal cartilage and bone cause inflammation in the joint and over time may lead to the development of arthritis. OCD is usually caused by a combination of several factors acting together, including:

- Rapid growth and large body size
- Nutrition: Diets very high in energy or have an imbalance in trace minerals (low copper diets)
- Genetics: Risk of OCD may be partially inherited
- Hormonal imbalances: Insulin and thyroid hormones
- Trauma and exercise: Trauma (including routine exercise) is often involved in the formation and loosening of the OCD flap

### Signs and Symptoms:

The most common sign is **effusion** (swelling) in the joint of a young horse (Figure 1). Signs can be seen as early as 5 months of age, but may not occur until the horse is started into work. Lameness varies with location and severity of the OCD; most horses are sound at a walk but may display lameness at faster speeds or when put into work. OCDs can occur in virtually all joints, but they occur most frequently in the hock, stifle and fetlock joints.



Figure 1. Both hocks in this picture have severe effusion (red arrows). Most horses with OCD will have a milder degree of swelling.

### Diagnostics:

Horses with severe lameness and joint swelling probably have a more serious problem and should be examined on an emergency basis. If your horse has a swollen joint it should be examined by your primary care veterinarian in order to diagnose OCD and to rule out other causes. Your veterinarian will probably want to do the following diagnostics:

- Physical Exam
- Lameness Exam
- Radiographs (Figure 2)

OCD is often bilateral and radiographs of the opposite joint should be taken, even if there is little or no swelling in that joint. Occasionally an OCD fragment is made entirely of cartilage (no bone) and so it can't be seen on the radiograph; only a defect in the main bone may be seen in these cases. Sometimes older horses are diagnosed with OCD incidentally without apparent clinical signs.



Figure 2. A typical OCD fragment in a hock (circled in red)

**Treatment:**

Usually the best treatment is surgical removal of the abnormal bone and cartilage. The **most common technique used to remove OCD fragments is arthroscopy** (Figure 3). Arthroscopy is performed by making two or more small (less than 1cm) incisions into the joint through which a small camera called an arthroscope and other specially designed instruments are placed.

**Arthroscopy is preferred** over arthrotomy (making a large incision into the joint) since the skin incisions are smaller, less surgical trauma is caused, post-op recovery time is shorter, and a more thorough exploration of the joint can be performed. Arthroscopic OCD fragment removal usually requires general anesthesia. These fragments are usually found when radiographs of the joint are taken for another reason, such as a pre-purchase examination. In these cases, an ACVS board-certified veterinary surgeon can make recommendations about whether treatment is indicated.



Figure 3. Several loose OCD fragments seen during arthroscopy of a stifle.

**Aftercare and Outcome:**

Aftercare recommendations depend on the location and severity of the OCD but **typically involve a period of stall rest** followed by progressive exercise. Full return to training may require several months. Postoperative bandaging will be required for some OCD locations and medication may be prescribed, including anti-inflammatory medications. A follow-up examination and suture removal may also be required. Specific recommendations on aftercare will be made by the veterinary surgeon for each case.

Prognosis for athletic function is good to excellent for most OCDs that are treated surgically. Some OCD locations, such as the shoulder, may have a reduced prognosis. In general, if the OCD lesion is not removed the prognosis for future soundness will be decreased. It is important to discuss the expected outcome, including appearance of the operated joint, with the veterinary surgeon during treatment selection.

This Animal Health Topic was written by and reviewed by Diplomates of the American College of Veterinary Surgeons. Any opinions stated in this article are not necessarily the official position of the American College of Veterinary Surgeons.

The American College of Veterinary Surgeons recommends contacting an ACVS board-certified veterinary surgeon or your general veterinarian for more information about this topic.

To find an ACVS Diplomat, visit [www.acvs.org/find-a-surgeon](http://www.acvs.org/find-a-surgeon).

**Large Animal Health Topic Feedback Form**

Your feedback helps us make the Animal Health topics serve you better. Please note that submissions to this form are **not monitored** by a board-certified surgeon. For questions about your animal's specific condition, please contact an [ACVS board-certified surgeon in your area](#).

**Was this article helpful to you?**

☒ Yes

☐ No

**Additional comments**


Submit