

## **What is discospondylitis?**

Discospondylitis is an infection of the intervertebral disc space. It can occur as a result of the spread of infection from elsewhere in the body (i.e. urinary tract, blood stream, prostate) or from local infection only in the disc space. It is most commonly caused by a bacterial infection; however, fungal discospondylitis can occur. It occurs most frequently in young to middle-aged male large-breed dogs, such as German Shepherds and Rottweilers. Dogs that are not neutered and develop infection of the prostate are predisposed to discospondylitis. Discospondylitis also occurs more commonly in animals that are immune-suppressed.

## **What are the clinical signs of discospondylitis?**

The most common clinical signs are back or neck pain, reluctance to walk, and decreased appetite. Some dogs may cry out when getting up or down or be reluctant to run or jump. The location of the pain depends on the location of the infection. Discospondylitis occurs most commonly in the lower back but can occur anywhere along the spine and often occurs in multiple locations. If the infection is severe or goes undiagnosed, the bone can become very weak and prone to fracture. In some cases, the infection can also spread to affect the spinal cord. If fracture or spinal cord infection occurs, animals can become paralyzed.

## **How is it diagnosed?**

Spinal X-Rays often show evidence of infection at the disc space, but MRI and/or CT scan is preferred to better visualize the bone and spinal cord and often necessary in early cases of discospondylitis, where X-Rays don't show dramatic change. In cases where it is safe, a needle can be driven into the intervertebral disc space to try to aspirate and culture the infectious organism. Because the urine and blood may also harbor infection in some dogs with discospondylitis, they are also cultured.

## **How is it treated?**

The appropriate antibiotic or antifungal treatment is employed based on the type of infectious organism grown via intervertebral disc, urine, or blood culture. In many cases, the infectious organism is not identified and treatment with an antibiotic that kills the most common type of bacteria (Staphylococcus) is initiated. Treatment for discospondylitis continues for a minimum of four to six months, with recheck neurologic exams and radiographs at regular intervals. When an animal has been pain-free and X-Rays show complete resolution of the infection, treatment can be discontinued.

## **What is the prognosis?**

With early and appropriate treatment, prognosis is good for dogs with bacterial discospondylitis. Fungal discospondylitis carries a much poorer prognosis. Recurrence of infection months to years after treatment can occur in some dogs.