What is discospondylitis?
Discospondylitis is infection of the space between vertebrae (disc/disc space). It can occur as a result of 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 the German shepherd and Rottweiler. Dogs who 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 for a long time without treatment, the bone can become very weak and is 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 discospondylitis diagnosed?
Spinal x-rays often show evidence of infection at the disc space, but MRI or CT scan is preferred to better visualize the bone and spinal cord, and is 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 inserted into the disc space to try to sample 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 discospondylitis treated?
The appropriate antibiotic or antifungal treatment is chosen based on the type of infectious organism grown via disc, urine, or blood culture. In some cases, the infectious organism is not or cannot be 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 4-6 months, with recheck neurologic exams and x-rays at regular intervals. When an animal has been pain-free and the x-rays show complete resolution of the infection, treatment can be discontinued.