Valley Fever (coccidioidomycosis) in Dogs

Valley Fever, or coccidioidomycosis, is caused by the soil dwelling fungus *Coccidioides immitis*. The disease is seen primarily in semi-arid areas such as Arizona, California, New Mexico, Texas and parts of central and South America. Animals (including humans) traveling through these areas are at risk of being exposed. Valley Fever is considered to be noncontagious from animal to animal except for the potential of contracting infection through draining skin lesions. The organism prefers acidic environments and is commonly found around the entrances to gopher and ground squirrel dens because of their urine. The incidence of disease increases in late summer and fall, or when human and dust-disturbing events (windstorms, construction) send dust into the atmosphere. *C. immitis* is inhaled from the environment and concentrates in the lungs, but has the ability to spread to other parts of the body. Young, large-breed dogs are most commonly affected, but cats and small dogs are susceptible too.

Many dogs are not obviously sick, or may have vague symptoms that are not recognized by owners. These animals often overcome disease without receiving treatment. Many dogs also however, develop symptoms approximately three weeks after infection. The primary infection is localized to the lungs and symptoms include cough, fever, depression, lack of appetite and weight loss. In some dogs, disseminated disease may occur which most commonly affects the skin, bones and joints. In severe cases, the disease can spread to the eyes or to the brain and cause seizures.

Clinical symptoms, diagnostic tests and travel history are equally important in diagnosing Valley Fever. Diagnostic testing includes blood tests and x-rays of the chest and bones that are swollen or painful. The blood tests include an antibody test often referred to as a “titer” that looks for increases in specific antibodies for Valley Fever. Titers are often negative in early disease, and may need to be repeated in one month.

Treatment of Valley Fever requires the use of antifungals which most commonly include ketoconazole, itraconazole and fluconazole. The course of treatment is usually
extensive and ranges from six months of medication to lifelong management. Animals with more severe disease (bone or brain involvement) usually require treatment of longer duration. Most dogs with clinical signs of Valley Fever, recover with appropriate and diligent treatment.