RESEARCH NOTE: IN Cases of Vasculitis, Consider Circovirus

The complete genome of a novel dog circovirus (DogCV) was characterized from the liver of a dog with severe hemorrhagic gastroenteritis, vasculitis, and granulomatous lymphadenitis. Additional dogs with vascular and granulomatous lesions were identified and examined for distribution of DogCV. Real-time PCR analysis showed a prevalence of 11.3% and 6.9% in fecal samples from dogs with diarrhea and healthy dogs, respectively. Of the DogCV+ dogs with diarrhea, 68% were coinfected with >1 other enteric pathogen; it is unclear what the role of this coinfection was in the pathogenesis of disease. DogCV DNA was also found in 3.3% of blood samples from dogs with thrombocytopenia

and neutropenia, fever of unknown origin, and past tick bite. Most known species of *Circovirus* infect birds, causing signs including malformations and necrosis of the integument, lymphoid depletion, and immunosuppression. Whether and when DogCV causes disease requires further investigation; however, circovirus, alone or in coinfection with other pathogens, should be considered in cases of unexplained vasculitis. DogCV might also be a complicating factor in other canine infectious diseases.

Source

Circovirus in tissues of dogs with vasculitis and hemorrhage. Li L, McGraw S, Zhu K, et al. *EMERG INFECT DIS* 19:534-541, 2013.

FOCUS Understanding Stifle Joint Radiolucency

This study examined tibial tuberosity radiolucency (TTR) on radiographs to better understand its causes and significance. Radiographs (n = 675) of canine stifle joints were reviewed; 21.5% were found to have TTR proximal and caudal to the tibial tuberosity. Radiolucency (ie, dark areas) ranged from small and faint to larger and well-defined. For dogs that had bilateral stifle radiographs available (n =52), radiolucency was bilateral in 96.2% of cases. Radiolucency size did not correlate with stifle disease. Breed size was significantly associated with TTR; toy-, small-, and medium-breed dogs were more commonly affected. Young age and medial patellar luxation (MPL) were also significantly associated with TTR. TTR may be caused by a retained cartilage core and may be associated with MPL. A causeand-effect relationship could not be established, and further studies to identify the cause for this radiographic lesion are warranted.

Commentary

When contralateral limb radiographs were

available, 96.2% had bilateral lucency. Dogs with lucency were 10 times as likely to have medial patellar luxation and much less likely to have a cranial cruciate ligament tear. No correlation was noted between radiolucency size and MPL grade. Histologically, these areas were comprised of hyaline cartilage and were consistent with retained cartilaginous cores near the growth plate.

It was not clear whether the retained cartilage was present because of other skeletal abnormalities usually found in dogs with MPL (eg, tibial torsion, femoral varus). If noted on a radiograph, this radiolucency should not be confused with neoplastic disease, but patellar disease should be investigated.—*Jonathan Miller, DVM, MS, DACVS*

Source

Prevalence, association with stifle conditions, and histopathologic characteristics of tibial tuberosity radiolucencies in dogs. Paek M, Engiles JB, Mai W. *VET RADIOL ULTRASOUN* 54:453-458, 2013.



Oral Suspension for Cats

Veraflox (pradofloxacin) Oral Suspension for Cats 25 mg/mL

For the treatment of skin infections (wounds and abscesses) in cats.

Do not use in dogs. BRIEF SUMMARY:

Before using Veraflox Oral Suspension for Cats, please consult the product insert, a summary of which follows:

CAUTION:

Federal law restricts this drug to use by or on the order of a licensed veterinarian. Federal law prohibits the extra-label use of this drug in food-producing animals.

PRODUCT DESCRIPTION:

Pradofloxacin is a fluoroquinolone antibiotic and belongs to the class of quinolone carboxylic acid derivatives. Each mL of Veraflox Oral Suspension provides 25 mg of pradofloxacin.

INDICATIONS:

Veraflox is indicated for the treatment of skin infections (wound and abscesses) in cats caused by susceptible strains of Pasteurella multocida, Streptococcus canis, Staphylococcus aureus, Staphylococcus felis, and Staphylococcus pseudintermedius.

CONTRAINDICATIONS:

DO NOT USE IN DOGS. Pradofloxacin has been shown to cause bone marrow suppression in dogs. Dogs may be particularly sensitive to this effect, potentially resulting in severe thrombocytopenia and neutropenia. Quinolone-class drugs have been shown to cause arthropathy in immature animals of most species tested, the dog being particularly sensitive to this side effect. Pradofloxacin is contraindicated in cats with a known hypersensitivity to quinolones.

HUMAN WARNINGS:

Not for human use. Keep out of reach of children. Individuals with a history of quinolone hypersensitivity should avoid this product. Avoid contact with eyes and skin. In case of ocular contact, immediately flush eyes with copious amounts of water. In case of dermal contact, wash skin with soap and water for at least 20 seconds. Consult a physician if irritation persists following ocular or dermal exposure or in case of accidental ingestion. In humans, there is a risk of photosensitization within a few hours after exposure to quinolones. If excessive accidental exposure occurs, avoid direct sunlight. Do not eat, drink or smoke while handling this product. For customer service or to obtain product information, including a Material Safety Data Sheet, call 1-800-633-3796. For medical emergencies or to report adverse reactions, call 1-800-422-9874.

ANIMAL WARNINGS:

For use in cats only. The administration of pradofloxacin for longer than 7 days induced reversible leukocyte, neutrophil, and lymphocyte decreases in healthy, 12-week-old kittens.

PRECAUTIONS:

The use of fluoroquinolones in cats has been associated with the development of retinopathy and/or blindness. Such products should be used with caution in cats. Quinolones have been show hoe produce erosions of cartilage of weight-bearing joints and other signs of arthropathy in immature animals of various species. The safety of pradofloxacin in cats younger than 12 weeks of age has not been evaluated. The safety of pradofloxacin in immune-compromised cats (i.e., cats infected with feline leukemia virus and/or feline immunedeficiency virus) has not been evaluated. Quinolones should be used with caution in animals with known or suspected central nervous system (CNS) disorders. In such animals, quinolones have, in rare instances, been associated with CNS stimulation that may lead to convulsive seizures. The safety of pradofloxacin in cats that are used for breeding or that are pregnant and/or lactating has not been evaluated.

ADVERSE REACTIONS:

In a multi-site field study, the most common adverse reactions seen in cats treated with Veraflox were diarrhea/loose stools, leukocytosis with neutrophilia, elevated CPK levels, and sneezing.

ANIMAL SAFETY:

In a target animal safety study in 32, 12-week-old kittens dosed at 0, 1, 3, and 5 times the recommended dose for 21 consecutive days. One 3X cat and three 5X cats had absolute neutrophil counts below the reference range. The most frequent abnormal clinical finding was soft feces. While this was seen in both treatment and control groups, it was observed more frequently in the 3X and 5X kittens.

U.S Patent No. 6,323,213 May, 2012 84364593/84364607, R.0 NADA141-344, Approved by FDA Made in Germany Bayer, the Bayer Cross and Veraflox are registered trademarks of Bayer. GHG041114

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