LEPTOSPIROSIS: THE ESSENTIAL NEED FOR TESTING

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This past year has unveiled many challenges around the world, but if it has highlighted anything in medicine, it is that zoonotic disease (ie, disease spread from animals to humans) is a major threat to the health of the human population. Veterinarians and public health officers are responsible for protecting their patients and clients and should focus on reducing this threat by using parasite preventives and vaccination strategies to protect dogs from diseases that may pose a threat to humans.

Leptospirosis is the most widespread zoonotic disease worldwide,[1] and although vaccination with a quadrivalent vaccine is core to patient and family protection, a strong prevention strategy must also include detection of positive patients through testing. In one study, 10% of humans infected with leptospirosis were infected from contact with their pets.[2] Although these canine infections may be due to a lack of appropriate vaccination, they also represent a subset of patients that are frequently being missed in the profession.

Many patients can be presented with noticeable clinical signs of acute illness such as fever, inappetence, and vomiting, but leptospirosis can also create a worrisome chronic carrier status in dogs characterized by subclinical urinary shedding.[3] This urination creates a reservoir of leptospires in the home environment, placing young children and family members at increased risk for transmission. Without proper testing and treatment, these leptospires may be shed for months in the urine of patients, creating a consistent risk for zoonosis in the environment.[1]

Thankfully, several testing options are now available, including reference laboratory PCR and microscopic agglutination testing, as well as the more recent point-of-care testing for in-clinic use. Because there are limitations to all tests in that none are 100% sensitive (ie, a negative test in an acutely ill patient does not always rule out disease),[4] it is always important to consider the timeline for a patient's onset of clinical signs and the accuracy of each test before it is performed and during interpretation.

REFERENCES

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