Diagnosing Leptospirosis Algorithm[1]

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Suspected Leptospirosis

Clinical signs: vomiting/diarrhoea, polyuria/polydipsia, fever, inappetance, lethargy. Suspect in dogs with signs of renal or hepatic failure in endemic areas

TEST

Complete Diagnostic Workup
CBC, chemistry profile, urinalysis, ± imaging

TEST

Perform Vetscan Rapid Lepto test

Negative*

EVALUATE

When did the clinical signs appear?

- Extended duration of clinic signs → **RE-EVALUATE**
  - **Leptospirosis unlikely**
  - Evaluate dog for other cause/etiology
- Recent onset of clinical signs → **MONITOR**
  - **Leptospirosis possible**
  - Consider PCR or treat and retest with Vetscan Rapid Lepto in 7-10 days

Positive

EVALUATE

What is the dog's vaccine status?

- **Recently Vaccinated**
  - **TEST & EVALUATE**
  - Leptospira blood RT-PCR + Leptospira urine PCR
  - **Negative** → **MONITOR**
    - **Leptospirosis possible[1]**
    - Consider treatment or paired MAT titers
  - **Positive** → **TREAT**
    - **Leptospirosis probable**
    - Treat
- **Unvaccinated** → **TREAT**
  - **Leptospirosis likely**
  - Treat

CBC = complete blood count
PCR = polymerase chain reaction
MAT = microscopic agglutination test
RT-PCR = Real-Time polymerase chain reaction

1. Based on Skyes JE, Hartmann K, Lunn KF, et al. 2010 ACVIM Small Animal Consensus Statemanet on Leptospirosis; Diagnosis, Epidemiology, Treatment, and Prevention. *J Vet Intern Med* 2011; 25:1-13.

*False negative PCR can occur with low bacterial loads due to antimicrobial use, disease phase and or immune response.

Compatable with Vetcan VUE+ Lateral Test Flow Reader

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LOOK DEEPER

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