

VET 433A Feline Infectious Peritonitis

■ Understand the importance of FIP as a cause of mortality in cats

- Prognosis
 - W/O tx: days to > 1yr (most 5-7 weeks)
 - W/ tx: good to excellent
- Negative prognostic factors
 - CNS involvement
 - Prognosis dismal for cats that fail to respond beyond 3 days

■ Know the cause of FIP

- Fecal-oral spread
- Mutation to virulent FIPV (multiplication in macrophages)
- Genetic susceptibility

■ Understand the proposed pathogeneses for FIP in cats

- FECV infects enterocytes = mild to inapparent enteritis
- FIPV infects macrophages = fulminant disease
- Virulent FIPV may not replicate in enterocytes well

■ Know the clinical signs and laboratory and imaging abnormalities in cats with FIP

- Signalment: 3 mo to 3 yrs, occasionally geriatric cats, purebred cats

PE findings	Laboratory Findings
Tachypnea	NNN anemia
Muffled heart sounds	Neutophilia
Icterus	Lymphopenia
Hepatomegaly	Thrombocytopenia
Splenomegaly	Azotemia
Irregular renomegaly	Elevated liver enzymes
Abdominal masses	Hyperbilirubinemia
Anterior uveitis	Hypoalbuminemia
Retinal detachment	Hyperglobulinemia
Hemorrhage	Effusion: Exudate to modified transudate
Neurologic signs	Low cellularity
	Proteinaceous
	Straw-colored and viscous

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■ Understand the diagnostic tests available for FIP in cats and how they are used to make a diagnosis

- No molecular test accurately differentiates FIPV infection from FECV infection
- IHC may be the most useful non-invasive anemortem diagnostic assay
- Feline coronavirus serology
 - Positive serology = exposure to any coronavirus
 - Does not predict FIP
- Titers may be suggestive but they vary between labs and some cats with end-stage FIP lack antibodies
- RT-PCR
 - No specific mutation distinguishes virulent from nonvirulent strains
- Biopsy and cytology
 - Immunocytology on effusion
 - ~60% sensitive
 - Biopsy
 - IHC

■ Know the treatment and prognosis for cats with FIP

- Supportive care (fluids, nutrition, fluid removal)
- Antiviral medications
 - Nucleoside analogs = inhibition of coronavirus RDRP
 - Protease inhibitor = inhibition of coronavirus protease

Practice Question: Which clinicopathologic findings are NOT typical of FIP infection?

a) Hyperglobulinemia

b) Thrombocytopenia

c) NNN anemia

d) Hypoalbuminemia