**Diagnosing effusive FIP**

**HISTORY: AGE BREED**
An opportunity for FCoV infection is essential
Around 70% of cats with FIP are pedigree
Any age, but over 50% of cats with FIP are < 2 years old (see table)
Usually a history of stress within weeks prior to presentation

**CAT PRESENTS WITH ABDOMINAL ENLARGEMENT OR DYSPNOEA**
Clinical examination reveals an effusion: which may be abdominal, pleural, pericardial, scrotal

**IN HOUSE EXAMINATION OF THE FLUID**
- **Pus Blood Urine**
  - Appearance: Straw coloured, clear, not odiferous, chylous
  - Protein level: <35g/l
  - Albumin:globulin ratio: < 0.8
  - Neutrophils and macrophages: Negative
  - Rivalta test: Negative
  - FCoV antibody test: ON BLOOD

- **FIP UNLIKELY**
  - <10g/l
  - < 30g/litre
  - > 0.8
  - 93% unlikely to be FIP

- **FIP UNLIKELY BUT POSSIBLE**
  - Negative*

- **FIP POSSIBLE**
  - The predictive value of a negative FCoV RT-PCR test on an effusion depends entirely on the sensitivity of the test being used

- **SEND EFFUSION TO EXTERNAL LABORATORY FOR RT-PCR**
  - Negative
  - Positive

- **FIP POSSIBLE**
  - Treat with 3C like protease inhibitor, if available

- **FIP POSSIBLE**
  - Use test kits with best sensitivity available.

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* FCoV antibody tests should be preferably performed on a blood sample, rather than an effusion sample, due to the risk of false negative results. Meli et al. Use test kits with best sensitivity available. Addie et al. 2016
**DIAGNOSING NON-EFFUSIVE FIP**

**HISTORY: AGE BREED**
An opportunity for FCoV infection is essential
Around 70% of cats with FIP are pedigree
Any age, but over 50% of cats with FIP are < 2 years old
Usually a history of stress weeks to months prior to presentation

**CLINICAL EXAMINATION**
Persistent moderate pyrexia > 4 days
Weight loss / failure to gain weight normally – i.e. stunting
Dull, lethargic, off colour
Anorexia
Intraocular signs (uveitis, keratic precipitates, aqueous flare, retinal vessel cuffing)
Neurological signs (ataxia, fits, nystagmus)
Enlarged mesenteric lymph node(s)
Icterus
Enlarged kidneys

**NOT FIP**

**FIP UNLIKELY**

**NOT FIP**

**BIOD TESTS**

- Albumin:globulin > 0.8*<br>27-45 g/l<br><10mmol/l<br>&gt;30%
- Globulin Hyperglob &gt;46 g/l
- Bilirubin Raised
- Haematocrit &lt;30%
- Anaemia Non-regenerative
- Lymphocyte count Lymphopenia
- FCoV antibody test** Positive

**EXTERNAL LABORATORY**

- Normal ALPHA-1 ACID GLYCOPROTEIN Above 1500 ul/ml
- Negative SEND BIOPSY/ FNA / AQUEOUS HUMOUR FOR RT-PCR Positive

The predictive value of a negative FCoV RT-PCR test depends on the sensitivity of the test being used, the integrity of the RNA during mailing, and that an FIP lesion was accurately selected.

**DO NOT DO RT-PCR ON SERUM OR BLOOD** – the test will be negative even in cats with FIP

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* Note that 15% of cats with FIP have alb:glob 0.8

www.catvirus.com
Blood sample

**HISTORY: AGE BREED**
An opportunity for FCoV infection is essential, e.g. cattery exposure
Any age of cat, though kittens over-represented, especially purebred
History of diarrhoea, plus or minus vomiting
No nutritional explanations, e.g. giving cow’s milk

**CLINICAL EXAMINATION**
Possible stunting or weight loss
Possible third eyelid protrusion
Gassy abdomen possible
Thickened large intestine possible
Enlarged mesenteric lymph nodes

**BLOOD TESTS**
Negative* FCoV antibody test Positive
Check other parameters to see if FIP is a concern (see figure 5)

**FAECAL SAMPLE**
Negative FCoV RT-PCR Positive

Be sure to rule out other bacterial, viral, protozoal, and parasitic causes

**IS FCoV ENTERITIS**
Treat with 3C like protease inhibitor, if available
Or feline interferon omega

* Use FCoV antibody tests with best sensitivity available. Addie et al 2016

www.catvirus.com
Using FCoV antibody and RT-PCR tests

**Sick cat**

- ? Wet FIP
- ? Dry FIP
- Monitor FIP treat’t

**Diarrhoea**

- ? FCoV

**FCoV Ab on blood**

- Positive
  - PP Neg depends on sensitivity of test
  - Not FCoV diarrhoea or FIP
    - FCoV RT-PCR effusion
      - Positive: is FIP
      - A positive FCoV antibody test does not indicate FIP

- Negative
  - FCoV diarrhoea is a diagnosis of exclusion

**Healthy cat**

- In contact FIP

**Screen**

- FCoV Ab on blood
  - Positive
    - FCoV RT-PCR on faeces
      - Positive
        - Re-test monthly
      - Negative
        - Go ahead
  - Negative

- FCoV Ab on blood
  - Positive: FIP
  - PP Neg depends on sensitivity of test
  - FCoV RT-PCR on blood is NOT recommended