

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

Likelihood of effusive FIP according to age and breed
 Soma et al

Age (yrs)	Pedigree cat	Domestic cat
<1	95	79
1	70	42
2-3	53	41
4-5	60	33
6-7	20	21
8-9	23	34
≥ 10	11	14

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

NOT FIP

Sample the effusion

IN HOUSE EXAMINATION OF THE FLUID

Appearance Straw coloured, clear, not odiferous, chylous

Protein level >35g/litre

Albumin:globulin ratio < 0.8

Cytology Neutrophils and macrophages

Rivalta test Positive PPV 58%

FCoV antibody test ON BLOOD Positive

Pus Blood Urine <10g/l

FIP UNLIKELY ← < 30g/litre

Bacteria, malignant cells or mostly lymphocytes Negative

93% unlikely to be FIP Negative*

FIP UNLIKELY BUT POSSIBLE

SEND EFFUSION TO EXTERNAL LABORATORY FOR RT-PCR

Negative

Positive

FIP POSSIBLE

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

Is FIP

Treat with feline interferon omega: 1 MU/kg s/c eod or to site of effusion, or 3C like protease inhibitor, if available. See FIP treatment page at catvirus.com

* 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

Blood sample

BLOOD TESTS

Albumin:globulin	< 0.4
Globulin	Hyperglob >46 g/l
Bilirubin	Raised
Haematocrit	<30%
Anaemia	Non-regenerative
Lymphocyte count	Lymphopenia
FCoV antibody test**	Positive

NOT FIP

FIP UNLIKELY

NOT FIP

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

FIP POSSIBLE

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

Is FIP
 100,000 units of feline interferon omega per os sid plus prednisolone or thalidomide.
 See treatment section of catvirus.com

* Note that 15% of cats with FIP have alb:glob 0.8
 ** Use test kits with best sensitivity available. Addie et al 2016

Diagnosing FCoV associated enteritis

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

NOT FCoV ENTERITIS

Blood sample

BLOOD TESTS
FCoV antibody test
Negative* Positive
Check other parameters to see if FIP is a concern
(see non-effusive FIP algorithm)

FCoV ENTERITIS UNLIKELY:
depends on sensitivity of test used

FCoV ENTERITIS POSSIBLE

FAECAL SAMPLE
FCoV RT-PCR

Negative

Positive

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

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

Using FCoV antibody and RT-PCR tests

