

# FIP Diagnosis

Ante mortem diagnosis of FIP remains a challenge. Clinical diagnosis of FIP should be based on a range of parameters including age, breed, number of cats in the household, clinical findings, haematology, biochemistry, analysis of effusions and specific tests for coronavirus or FIP.

A range of tests are available to evaluate cats with a clinical history and / or haematological and serum biochemical changes or effusion cytology supportive of FIP.

## Serological Tests:

Feline Coronavirus Qualitative Antibody (Immunocomb), Feline Coronavirus Quantitative Antibody (IFA):

These assays assess for coronavirus antibody in the blood. They are NOT specific for FIP.

They are relatively sensitive tests, however can give false negatives with either very high viral loads or early in infection (within the first 3 weeks). Thus a negative result does not totally exclude coronavirus infection or FIP.

Higher titres do not correlate with a higher risk of developing FIP, however cats with higher IFA titres are more likely to be shedding virus.

## Immunofluorescence of effusion fluids

This assay detects direct immunofluorescent staining of FIP-related antigens in macrophages in effusion fluids. This test has high specificity (near 100%) but a moderate sensitivity of 75%.

Effusion fluids need to be collected into an EDTA tube, and must be submitted as fresh as possible, as these samples deteriorate rapidly.

## PCR

PCR testing of faecal samples or CSF samples are available. Identification of coronavirus in the faeces by PCR identifies enteric coronavirus, but is not diagnostic for FIP. Identification of coronavirus in CSF strongly supports neurological FIP.

## Histology

Histology is the gold standard diagnostic method. Typical pyogranulomas with vasculitis are diagnostic. Histology can successfully diagnose both effusive and dry forms of FIP with suitable sample selection. True cut biopsies have a lower diagnostic sensitivity than larger tissue samples.

## Immunohistochemistry

Immunohistochemistry for FIP can be used to confirm histological diagnoses, or to confirm the presence of FIP when non typical histological changes are identified.