

Feline immunodeficiency

FACT SHEET

What is feline immunodeficiency?

- First isolated in 1986, feline immunodeficiency virus (FIV) is a retrovirus closely related to HIV. Most felids are susceptible to FIV, but humans are not.
- FIV is endemic in domestic cat populations worldwide (subtypes A and B are most common in Europe).
- Seroprevalence of FIV varies greatly between regions.
- Sick adult cats, male cats and free-roaming cats are most likely to be infected.
- FIV loses infectivity quickly outside the host and is susceptible to all disinfectants including common soap.

Infection

- Most FIV infections are acquired by bites (fights, mating) from persistently infected cats. The risk of transmission is low in households with socially welladapted cats.
- Transmission from mother to kittens may occur, especially if the queen is undergoing an acute infection.
- FIV infected cats are persistently infected in spite of their ability to mount antibody and cell-mediated immune responses.

Clinical signs

- FIV infection has a long latent or 'asymptomatic' phase. Infected cats generally remain free of clinical signs for several years, and some cats never develop disease.
- Most clinical signs are not caused by FIV, but are the consequence of immunodeficiency.
- Typical manifestations are:
 - Chronic gingivostomatitis

- Chronic rhinitis

- Lymphadenopathy

- Weight loss
- Renal failure associated with immune-mediated glomerulonephritis

Diagnosis

- Positive in-practice test results obtained in a low-prevalence or low-risk population should always be confirmed by a laboratory.
- Western blot is the 'gold standard' laboratory test for FIV serology.
- PCR-based assays (for proviral DNA) are variable in performance and may even be inferior to serological tests.
- Kittens from FIV infected queens may test seropositive due to persisting maternal antibodies, and should be retested at 16 weeks of age. Exceptionally, kittens may remain seropositive until 6 months of age.

Disease management

- Cats should never be euthanised only on the basis of an FIV positive test result.
 With appropriate care, FIV infected cats may live as long as uninfected cats.
- Neutering is recommended to reduce aggression and decrease biting incidents.
- FIV infected cats should be kept indoors and receive regular (6 monthly) veterinary health checks including routine biochemistry, haematology and weight monitoring.
- Prompt and accurate diagnosis of any secondary illness is essential.
- FIV infected cats can be housed in the same ward as other patients, but should be kept in individual cages separate from cats with contagious conditions.
- In rescue shelters, cats should be housed individually to avoid cross-infection (at the very least, FIV positive cats should be segregated).
- AZT (azidothymidine) may be used, but side effects may occur.
- Surgery is well-tolerated by asymptomatic FIV infected cats, but perioperative antibiotic treatment should be used in all cases.
- Care must be taken to avoid iatrogenic virus transmission (e.g. by thorough decontamination of surgical instruments that have been used on seropositive cats).



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Vaccination recommendations

- At present there is no FIV vaccine commercially available in Europe.
- Vaccination against routine pathogens can be considered for healthy seropositive cats but is not recommended for sick, FIV infected cats.
- Vaccination of FIV-infected cats is controversial. In the early stages of infection, FIV infected cats may mount strong immune responses to vaccination; however, this immune stimulation may lead to progression of FIV infection, promoting virus production. Therefore, the potential benefits and risks have to be weighed up for each individual. In case of vaccination, inactivated vaccines are recommended.



Chronic infections may arise due to FIV Infection



FIV positive cats (like this one) may live as long as uninfected cats



Weight loss and haemorrhagic enteritis in an FIV positive cat



 Chronic faucitis is often associated with FIV infection



Cats should never be euthanised on the basis of an FIV positive test alone