

Feline herpesvirus upper respiratory infection

FACT SHEET

What is feline herpesvirus upper respiratory infection?

- It is caused by feline herpesvirus (FHV), which has a worldwide distribution, also in non-domestic felids.
- FHV often occurs in association with feline calicivirus and bacteria.
- FHV remains latent after recovery, and most cats become lifelong latent virus carriers.
- Stress or immunosuppressive corticosteroid treatment may lead to virus reactivation and shedding.

Infection

- Sick cats shed FHV in oral, nasal and conjunctival secretions; shedding may last for 3 weeks.
- Infection requires direct contact with a shedding cat.
- Infection is common in multi-cat situations like boarding and breeding catteries, shelters and multi-cat households.
- Kittens may acquire infection (with disease signs or subclinically) from their infected mothers.

Clinical signs

- Acute rhinitis and conjunctivitis, usually accompanied by fever, depression and anorexia. Clinical signs are particularly severe in young kittens; fatal pneumonia may occur.
- Ulcerative, dendritic keratitis. FHV is the most important cause of corneal ulceration.
- Signs usually resolve within one to two weeks.

Diagnosis

- Samples consist of conjunctival, corneal or oropharyngeal swabs, corneal biopsies.

- Do not sample cats recently vaccinated with a modified-live vaccine.
- Positive PCR results should be interpreted with caution, as they may be due to low level shedding or viral latency. Quantitative PCR assays may be useful: high viral loads are indicative of active infection.
- Virus isolation is less sensitive than PCR, but indicates live virus.
- Conjunctival samples should be taken before application of fluorescein or Rose Bengal.
- Serological tests are not recommended.

Disease management

- Supportive therapy (including fluid therapy) and good nursing care are essential.
- Anorectic cats should be fed blended, highly palatable, even warmed-up food.
- Mucolytic drugs (e.g. bromhexidine) or nebulisation with saline may offer relief.
- Broad-spectrum antibiotics should be given to prevent secondary bacterial infections.
- Topical antiviral drugs may be used for the treatment of acute FHV ocular disease.
- In shelters, new cats should be quarantined for 3 weeks.
- In breeding catteries, queens should kitten in isolation and the kittens should not mix with other cats until vaccinated.
- Asymptomatic FIV or FeLV infected cats can be successfully vaccinated.
- FHV is quite labile and susceptible to most disinfectants, antiseptics and detergents.

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Vaccination recommendations

- All healthy cats should be vaccinated against FHV (core vaccine component).
- Two injections at 9 and 12 weeks of age are recommended, and a first booster one year later.
- Adult cats with an unknown or uncertain vaccination status should also receive two doses at an interval of 2 to 4 weeks.
- Boosters should be given at yearly intervals. For cats in low-risk situations (e.g. indoor-only cats), three-yearly intervals suffice.
- If booster vaccinations have lapsed:
 - a single injection suffices, if < 3 years since last vaccination;
 - two injections 2-4 weeks apart are needed, if > 3 years since last vaccination.
- Cats that have recovered from FHV-associated disease are usually not protected for life and should also be vaccinated.



Image courtesy of Merial

■ Acute conjunctivitis and keratitis

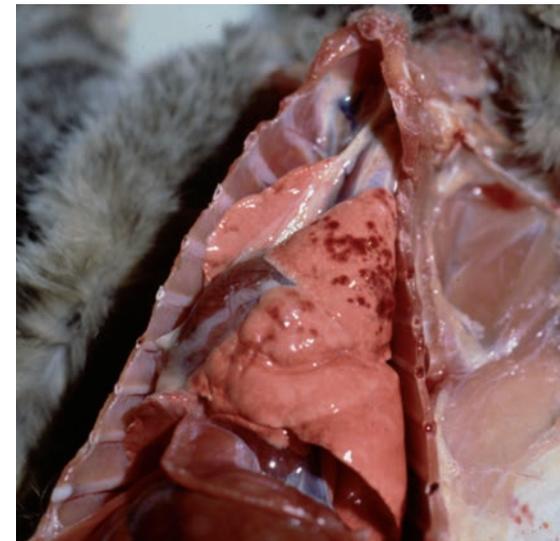


Image courtesy of Merial

■ Haemorrhagic pneumonia

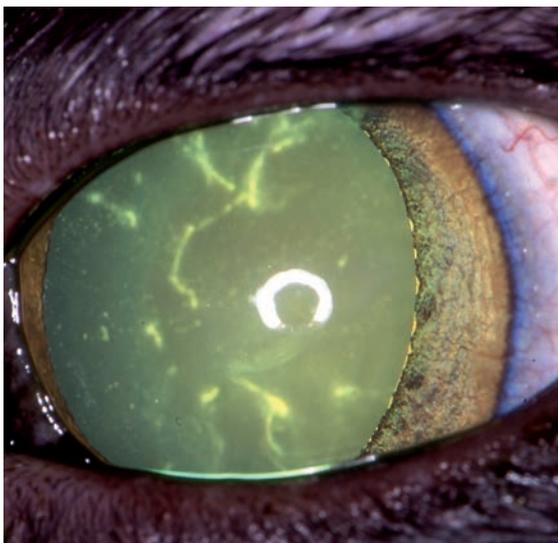


Image courtesy of Dr Eric Dean

■ Dendritic ulcerative keratitis

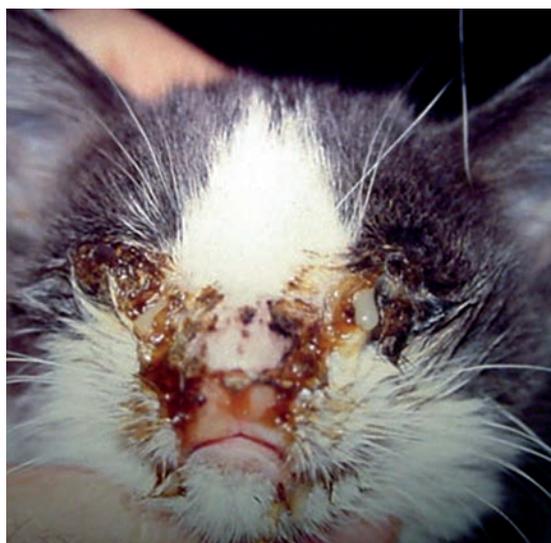


Image courtesy of Albert Lloret

■ Acute rhinitis and keratoconjunctivitis

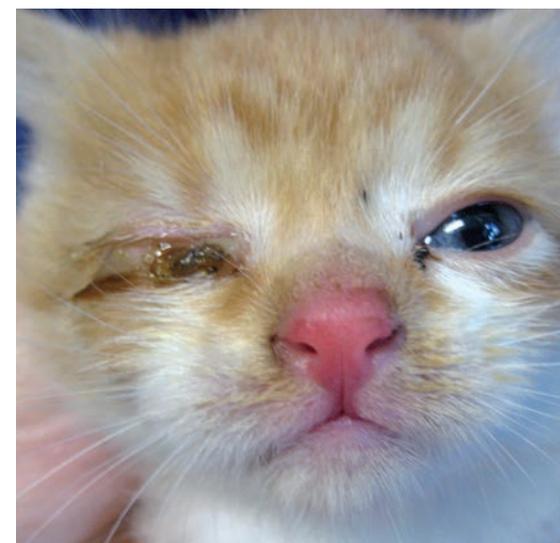


Image courtesy of Julia Beatty

■ Acute conjunctivitis