

A NOTE ON FELINE HERPESVIRUS INFECTION OR FELINE VIRAL RHINOTRACHEITIS

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Feline Viral Rhinotracheitis (FVR) is an infectious disease caused by feline herpesvirus type-1. As with other herpes viruses, the virus is very species specific, and is only known to cause infections in domestic and wild cats (Maggs D.J., 2005). The virus can infect cats of all ages. Feline Viral Rhinotracheitis is a major cause of upper respiratory disease in cats, and is the most common cause of conjunctivitis (inflammation of the tissues surrounding the eye, especially the lining of the lids and the third eyelid).

A cat becomes infected with this virus by direct contact with virus particles. The virus is excreted in saliva and in discharges from the eyes and nose of an infected cat. Therefore, an infection occurs when a susceptible cat comes into direct contact with an infected cat, or comes into contact with inanimate objects (called 'fomites') that have been contaminated with viral particles. But infection tends to be more severe in young animals or animals that have another chronic disease. Kittens born to a cat that is carrying a latent FVR infection may become infected after birth. In these kittens, symptoms usually develop several weeks after birth, and the infection can be very serious (Radford *et al.* 2004).



Fig.1. Kittens suffering with feline herpesvirus

Six cats and three kittens were presented at Faculty of Veterinary Medicine, Jigjiga University with a typical symptoms of FVR involving the nose, throat and eyes, and included sneezing, nasal congestion, conjunctivitis, excessive blinking, and discharges from the eyes and nose that range from clear and watery to thick and purulent discharge. In two cases there was keratitis also. Other non-

specific symptoms present include fever, lethargy, anorexia or poor appetite, and enlarged lymph nodes.

For confirmative diagnosis, specific identification of FVR-1 virus particles were made by collecting samples of cells and discharges from the nose, eyes or back of the throat. Identification of feline herpes virus DNA was done by polymerase chain reaction amplification (PCR testing).

Cats were treated symptomatically. Conjunctivitis and keratitis were treated with topical eye medications, i.e. with antiviral ophthalmic drops. Some cats responded to supplementation with L-lysine, an amino acid that helped to prevent the replication of the FVR virus, thus decreasing the amount of viral particles that are shed during an infection. Broad spectrum antibacterial drugs were also given to prevent secondary bacterial infections from complicating the disease, particularly in kittens.

It was also recorded that the FVR vaccine could not completely prevent an infection from occurring if the cat was exposed to the virus, but it had significantly reduced the severity of the infection and had shortened the length of the illness. Solid immunity to these viruses was not long term, and might have overcome by exposure to a high dose of virus. Therefore, the FVR vaccine needs to be boosted regularly.

We concluded that, once infected, the majority of cats do not get rid of the virus. However, symptoms can be treated. Use, oral antibiotics or antiviral medications to help ease symptoms, and drops or creams may be used for conjunctivitis or other eye irritations. With medication, good nutrition and tender loving care, most cats had made a successful recovery.

References

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