

Importance of Routine Screening for FIV Infection in Aged Cats (Yaşlı Kedilerde Rutin FIV Enfeksiyonu Bakışının Önemi)

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Dear Editor,

In the following case, Feline Immunodeficiency Virus (FIV) in a 9 year old cat is described with physical, laboratory, and pathological features to emphasize the importance of routine screening for FIV infection in old cats with especially stomatitis and chronic weight loss symptoms.

FIV is the main retrovirus of domestic cats. The infection, similar to the human immunodeficiency virus, is characterized by a long asymptomatic period, followed by increased susceptibility to opportunistic infections. In many cases, the clinical signs are the result of a secondary infection. FIV itself is responsible for immunodeficiency (making the cat more susceptible to secondary infections and neoplasia) or immune stimulation (resulting in immune-mediated disease). FIV infected cats usually had already been developed one or more diseases, which is called AIDS Related Complex (ARC) ¹. In majority, observed symptoms include stomatitis, gingivitis, weight loss of more than 20% of the body weight, respiratory tract diseases, dermatitis, wide-spread lymphadenopathies, secondary infections, chronic inflammations, neoplastic diseases and stomatitis ². The virus is excreted with the saliva, nasal discharge, urine, vaginal discharge, faeces and blood of carrier or sick animals and is common worldwide. The prevalence of FIV was reported to be from 1.2% to 43.9% ³ in the world, and 22.3% in Turkey ⁴.

A 9 year old male cat was referred to our clinics with pyogranulomatous dermatitis at the head (*Fig. 1*),

advanced stomatitis, gingivitis (*Fig. 2*) and failure in eating. In the clinical examination, significant weight loss and lymphadenopathic submandibular lymph nodes were determined in addition to severe stomatitis and gingivitis. Cell blood count revealed macrocytic, hypochromic anemia (RBC $2.5 \times 10^6/\text{mm}^3$, MCHC 32 g/dL, MCV 56 fL, Hb 4.5 g/dL), leucocytosis (WBC $27.000/\text{mm}^3$), lymphocytopenia ($1.080/\text{mm}^3$), neutrophilia ($24.030/\text{mm}^3$), high band neutrophil count ($540/\text{mm}^3$) and platelet clumps were determined. Rouleaux formation observed in red blood cells were neglected due to the fact that it is accepted normal in cats and horses ⁵.


Serum biochemistry indicated normal liver enzyme profile, glucose, blood urea nitrogen and creatinin levels, where a high total protein level (10.4 g/dl) and an albumin level of (2.3 g/dl) were determined; suggesting a low albumine/globuline ratio which is a possible indicator of an expected humoral reaction.

ELISA detection for FIV antibodies was positive and for Feline Leukemia Virus antigen was determined negative.

Biopsy material obtained from the skin and oral lesions (*Fig. 1* and *Fig. 3*) revealed degenerative and necrotic changes, wide erosive areas and ulcerations. In both tissues, there were pseudomembranes covered with necrotic epithelium and inflammatory cells at the epithelium surface from place to place. In dermis and oral submucosa, intensive mononuclear cells and many neutrophile infiltrations especially around veins, were

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determined. No infectious agents were observed at specific dyings. These microscopic findings indicated erosive-ulcerative dermatitis and stomatitis.

Since old cats with FIV infection do not present specific symptoms, the practitioners usually focus at the treatment of the signs and misdiagnose the case, mostly due to the limited number of veterinary diagnostic laboratories in our country. However, for the last few

years, success to some extent had been achieved by the virustatic agents (AZT, PMEA) in the treatment of the disease. With this case, we wanted to present the unspesific clinical reflection of the disease to emphasize the importance of routine screening of FIV infection in old cats with various symptoms, especially gingivitis, stomatitis, severe weight loss and dermatitis, for that, accurate diagnosis will lead to accurate therapy and in addition will prevent the spreading of the virus.



Fig 1. Pyogranulomatous dermatitis at the head, which biopsy material obtained



Fig 3. The view of oral lesions, which biopsy material obtained from



Fig 2. The view of advanced stomatitis and gingivitis

REFERENCES

1. Shelton GH, Linenberger ML, Grant CK, Abkowitz JL: Hematologic manifestations of feline immunodeficiency virus infection. *Blood*, 76, 1104-1109, 1990.
2. Shelton GH, Linenberger ML, Abkowitz JL: Hematologic abnormalities in cats seropositive for feline immunodeficiency virus. *JAVMA*, 10, 1353-1357, 1991.
3. Luria BJ, Levy JK, Lappin MR, Breitswerdt EB, Legendre AM, Hernandez JA, Gorman SP, Lee IT: Prevalence of infectious diseases in feral cats in Northern Florida. *J Feline Med Survey*, 6, 287-296, 2004.
4. Yılmaz H, Ilgaz A, Harbour DA: Prevalence of FIV and FeLV infections in cats in Istanbul. *J Feline Med Survey*, 2, 69-70, 2000.
5. Turgut K: Veteriner Klinik Laboratuar Teşhis. Bahçivanlar Basım, Genişletilmiş İkinci Baskı, Konya, 2000.