Feline Retroviruses

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In the Literature

Spada E, Perego R, Sgamma EA, Proverbio D. Survival time and effect of selected predictor variables on survival in owned pet cats seropositive for feline immunodeficiency and leukemia virus attending a referral clinic in northern Italy. *Prev Vet Med*. 2018;150:38-46.

FROM THE PAGE ...

Feline immunodeficiency virus (FIV) can cause an acquired immune deficiency syndrome, predisposing cats to other infections. However, most naturally FIV-infected cats do not develop a severe clinical syndrome, especially if appropriate husbandry and healthcare are provided.[1-3]

Feline leukemia virus (FeLV) is more pathogenic than FIV. Cats with FeLV frequently succumb to fatal diseases associated with FeLV infection (eg, bone marrow suppression leading to nonregenerative anemia, secondary infections, neoplasia), resulting in decreased life expectancy in these cats.[4]

This retrospective cohort study aimed to estimate survival times and evaluate select predictor factors on survival in cats that tested positive for FIV antibodies and/or FeLV antigen. Of the 816 cats tested, 117 (14.3%) tested positive for infection, of which 60 were FIV positive, 46 were FeLV positive, and 11 were both FIV and FeLV positive. Seroprevalence rates for FIV, FeLV, and FIV–and-FeLV–coinfected cats were thus 7.4%, 5.6%, and 1.4%, respectively.

Survival data agreed with previous studies.[2,3,5-9] Survival time for FIV-infected cats was not statistically different as compared with retrovirus-negative cats. Median survival times for FeLV-infected and FIV–and-FeLV–coinfected cats were significantly shorter (714 days and 77 days, respectively) as compared with retrovirus-negative and FIV-infected cats (3960 days and 2040 days, respectively). Median age at diagnosis for FIV-infected cats (5 years) was higher than for FeLV-infected cats (2 years), and median age of coinfected cats was 7 years. Despite shorter survival times, some cats with FeLV and cats with FIV and FeLV lived much longer than their respective median survival times (as long as 8.5 years and 4.9 years, respectively). The wide survival time distribution highlights that FeLV infection is not necessarily suggestive of an immediate death, and clinicians should assess FeLV-infected and coinfected cats case by case. Only reduced RBC count was shown to correlate negatively with median survival time in all retroviral-infected cats.

… TO YOUR PATIENTS

Key pearls to put into practice:

1. FIV and FeLV infection should not be considered indicative of pending death in infected cats.

2. FeLV infection is often more pathogenic and progresses more rapidly than does FIV infection. As represented in this study, causes of death in FeLV-infected cats may primarily be due to lymphoma and, less commonly, anemia. FeLV and FIV coinfection likely results in more severe and rapidly progressive disease.

3. Only reduced RBC counts at time of FIV and FeLV diagnosis have been shown to be a negative prognostic indictor for survival; in this study, FeLV-infected cats with reduced RBC counts at diagnosis had a death ratio 3.5 times higher than FeLV-infected cats with normal RBC counts at diagnosis. Thus, blood counts should be evaluated at diagnosis and all follow-up examinations for retrovirus-infected cats.

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