OCORRÊNCIA DE ANEMIAS EM GATOS ATENDIDOS NO HOSPITAL VETERINÁRIO-HOVET DA FMVZ-USP: RELAÇÃO ENTRE ANEMIA E INFECÇÃO PELO VÍRUS DA LEUCEMIA FELINA

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Objetivos

Os felinos são acometidos por dois importantes retrovírus, o vírus da Leucemia Felina (FeLV) e o vírus da Imunodeficiência felina (FIV). Ambos podem causar imunodeficiências e várias alterações sistêmicas, dentre elas, as anemias. Este estudo teve como objetivos estabelecer a casuística de gatos com anemia, com enfoque na presença do FeLV, no atendimento do Hospital Veterinário da FMVZ/USP (HOVET- USP) nos anos de 2019 a 2022 e caracterizar a anemia nos gatos positivos para FeLV quanto à gravidade, classificação hematimétrica e caráter regenerativo.

Métodos e Procedimentos

Foi realizado um estudo retrospectivo por meio do levantamento dos hemogramas solicitados ao Laboratório Clínico do Hospital Veterinário (HOVET) da Faculdade de Medicina Veterinária e Zootecnia da Universidade de São Paulo (FMVZ USP), entre os anos de 2019 a 2022, somando um total de 2633 hemogramas. Foram excluídos do estudo exames com dados parciais, animais de raça com características hematológicas específicas e hemogramas sequenciais de um mesmo animal, no período de até um ano, para controle de tratamento. Para inclusão no estudo foram considerados anêmicos os animais com hematócrito igual ou inferior a 29%. Foram julgados aptos à análise, 1780 hemogramas. Desse total, 523 gatos (29,4%) foram testados para FeLV, por meio de teste sorológico rápido, uma única vez, sendo que a maior parte dos animais já havia realizado o teste antes da consulta considerada para esta análise (n=303). Doze animais foram excluídos por serem positivos também para o vírus da imunodeficiência felina, sendo incluídos para análise 511 animais. Além da caracterização da anemia, também foram analisados dados sobre o sexo dos animais. Para análise estatística foi utilizado o software comercial R e o aplicativo Microsoft Excel e testes não paramétricos, com nível de significância de $\alpha = 0,05$.

Resultados

Dos 511 animais testados para FeLV que foram incluídos, foram identificados 71 (13,9%) animais positivos, e destes, 45 (63,3%) anêmicos e 26 (36,7%) não anêmicos. Foi possível observar que houve um predomínio de gatos com anemia normocítica normocrômica não regenerativa (37,9%) e macrocítica normocrômica não regenerativo (31%). Além disso, observou-se nessa casuística que os machos tem mais chance de apresentar FeLV

(OR:2,35) anemias de maior gravidade (OR:0,39).
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Discussão e Conclusão

Dos 511 animais testados para FeLV, 13,9% (71) foram positivos, o que representa uma frequência elevada, principalmente quando comparada a países desenvolvidos. Destes, 63,3% (45) eram anêmicos, sendo mais prevalente a anemia normocítica normocrômica não regenerativa. Quanto aos animais FeLV negativos, ressalta-se que isso pode estar associado à ampla gama de sintomas que permite que animais com outras doenças sejam testados, ou ainda, que o teste sorológico possa ter apresentado um resultado falso-negativo, já que não foi realizado um segundo teste. Mas é fato que, dos animais positivos, a frequência de animais anêmicos foi muito elevada. Além disso, FeLV foi um fator que afetou significativamente o valor do hematócrito, levando a anemias mais graves.

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OCCURRENCE OF ANEMIA IN CATS TREATED AT THE VETERINARY HOSPITAL-HOVET OF FMVZ-USP: RELATIONSHIP BETWEEN ANEMIA AND FELINE LEUKEMIA VIRUS INFECTION

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Objectives

Felines are affected by two important retroviruses, the Feline Leukemia Virus (FeLV) and the Feline Immunodeficiency Virus (FIV). Both can cause immunodeficiency and various systemic alterations, including anemia. The aims of this study were to establish the casuistry of cats with anemia, with a focus on the presence of FeLV, seen at the FMVZ/USP Veterinary Hospital (HOVET-USP) between 2019 and 2022 and to characterize the anemia in FeLV-positive cats in terms of severity, hematimetric classification and regenerative character.

Materials and Methods

A retrospective study was carried out by surveying the blood counts requested at the Clinical Laboratory of the Veterinary Hospital (HOVET) of the Faculty of Veterinary Medicine and Zootechny of the University of São Paulo (FMVZ USP) between 2019 and 2022, totaling 2633 blood counts. Examinations with partial data, animals of breeds with specific hematological characteristics and sequential blood counts of the same animal over a period of up to one year for treatment control were excluded from the study. Animals with a hematocrit of 29% or less were considered anemic for inclusion in the study. A total of 1,780 blood counts were considered suitable for analysis. Of this total, 523 cats (29.4%) had been tested for FeLV using a rapid serological test only once, and most of the animals had already been tested before the appointment considered for this analysis (n=303). Twelve animals were excluded because they were also positive for the feline immunodeficiency virus, and 511 animals were included for analysis. In addition to characterizing anaemia, data on the sex of the animals was also analyzed. The commercial software R and the Microsoft Excel application were used for statistical analysis, as well as non-parametric tests, with a significance level of $\alpha = 0.05$.

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Results

Of the 511 animals tested for FeLV that were included, 71 (13.9%) were positive, of which 45 (63.3%) were anemic and 26 (36.7%) were non-anemic. It was possible to observe that there was a predominance of cats with non-regenerative normocytic normochromic anemia (37.9%) and non-regenerative macrocytic normochromic anemia (31%). In addition, we found that male cats were more likely to have FeLV (OR:2.35) and more severe anemia (OR:0.39).

Discussion and Conclusion

Of the 511 animals tested for FeLV, 13.9% (71) were positive, which represents a high frequency, especially when compared to developed countries. Of these, 63.3% (45) were anemic, with non-regenerative normocytic normochromic anemia being the most prevalent. As for the FeLV-negative animals, it should be noted that this may be associated with the wide range of symptoms which allows animals with other diseases to be tested, or that the serological test may have shown a false-negative result, since a second test was not carried out. However, it is true that of the positive animals, the frequency of anemic animals was very high. In addition, FeLV was a factor that significantly affected the hematocrit value, leading to more severe anemia.

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