

Summary of the DVM thesis No 17549, Faculty of Veterinary Medicine, Urmia University.

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Title of thesis: Evaluation of serum levels of vitamins C and D in cats with gingivostomatitis

Summary:

Introduction and the aim of study:

Gingivostomatitis is a common problem in cats. This condition is a severe and persistent oral inflammation that can significantly impact cats' quality of life by causing difficulty in feeding, pain, weakness, and disability. Treatment methods for this condition are invasive and challenging, and so far, no definitive cure has been found. It seems that no research has been conducted on the levels of vitamins D and C in cats with gingivostomatitis to date. Therefore, the aim of this study is to evaluate the serum levels of these vitamins in cats with gingivitis and stomatitis compared to healthy cats.

Materials and Methods:

In this study, samples were taken from 30 cats of different breeds and ages that were referred to the veterinary hospital of Urmia University. Among these 30 cats, 15 were healthy, and 15 were affected by the disease. In the grouping of cats, any involvement with gingivostomatitis, including mild marginal involvement, pharyngeal involvement, and severe gingivostomatitis, was considered as affected. Vitamin C levels were measured and calculated using the calorimetric method, and vitamin D levels were obtained using the ELISA kit.

Results:

The results of this study showed no significant difference in blood levels of vitamin C between healthy cats and cats with gingivostomatitis. The study's findings indicated a significant difference in blood levels of vitamin D between healthy cats and those with gingivostomatitis.

Conclusion:

The results of this research suggest that vitamin D is associated with feline gingivostomatitis and that a deficiency in vitamin D can be a risk factor in the development of gingivostomatitis. This study did not find a significant relationship between serum vitamin C levels and gingivostomatitis in cats. This does not negate the role of vitamin C in oral health. Given the species studied, this observation may be related to the cats' ability to synthesize the necessary vitamin C in their liver, unlike humans, as cats do not need to consume vitamin C.

Key words: Gingivostomatitis, vitamin D, vitamin C, Cat