**FELINE RENAL CHRONIC DISEASE: A RETROSPECTIVE STUDY OF THE SERUM CREATINE VALUE IN THE FIRST EPISODE OF HOSPITALIZATION, AS A PREDICTIVE VALUE FOR RELAPSE.**

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**Introduction:** Chronic kidney disease (CKD) is one the most prevalent medical conditions affecting geriatric cats. After CKD becomes clinical, periods of exacerbation and stability alternate, making it difficult to predict the next relapse.

**Objectives:** The objective of these study was to verify the existence of a correlation between creatininemia in cats with CKD at discharge and the period of relapse (days), providing the possibility of predicting the duration period until an exacerbation, through the value of creatinine at discharge. Additionally, it is intended to prove the existence of a statistical association between several prognostic factors and the moment of relapse.

**Methods:** The inclusion criteria for the study were: male and female, aged between 4 and 20 years; diagnosed with CKD and staged according to IRIS criteria; relapsing due to exacerbation of CKD in the period between 2017 and 2020, presented at Centro Hospitalar Veterinário. Discharge was decided when the patient was stable: hydrated and eating voluntarily. Creatininemia was also considered for discharge assignment, when the value that was closest to the baseline value. The latter was defined at the time of CKD staging, when the animal is stable. When the baseline creatinine value was unknown, it was considered that the discharge creatinine should be the lowest serum value without variations greater than 0.3 mg/dl in relation to previous measurements. Cats with a previous diagnosis of CKD were considered a recurrence, when returned to the hospital due to an acute onset of clinical signs compatible with exacerbation of CKD,

such as lethargy, anorexia, vomiting or azotemia. Statistical analysis of data was performed using IBM SPSS Statistics (version 25). Correlation analyzes were performed between the variables and Pearson's correlation coefficient was used whenever the variables were quantitative. If the variables were of a qualitative, the Chi-square test would be used. A p-value of 0,05 was considered to reject or accept H0

**Results.** 44 cats (24 females and 20 males) were included in these study. Creatinine values at admission, at discharge and their variation were registered. The median of the former was 5.06 mg/dl, the median of the latter was 2.97 mg/dl and the median of their variation was -1.87 mg/dl. The median hematocrit was 31.40%. Creatininemia at the time of relapse was also an assessed parameter and the median of this value was found to be 5.5 mg/dl. The days from discharge to recurrence were counted and the median of this parameter was 106 days. There was no statistical significance between most variables (p-value >0.05) and the period from discharge to recurrence. However, it was found that there is a statistically significant relationship (p-value < 0.05) between hematocrit and days elapsed until recurrence.

**Conclusion:** It was concluded that there is no significant correlation (p = 0.908) between creatininemia value at the time of discharge and the days until relapse. Among the studied prognostic factors, hematocrit value has a significant association with the relapse time (p = 0.030), and lower hematocrit values were associated with shorter relapse time.