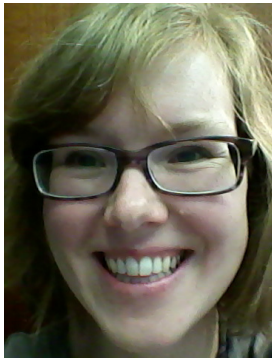
RESEARCH AWARD: VAN FOREEST AWARD



THE CORRELATION BETWEEN THE FCEAI, FOLATE, COBALAMIN AND ALBUMIN WITH REGARD TO HISTOLOGY AND CYTOLOGY IN CHRONIC ENTEROPATHIES AND INTESTINAL LYMPHOMA IN 147 CATS

Stefanie Mitze (DVM), Katharina Moser (DVM), Erik Teske (DVM, PhD, Dipl. ECVIM-CA (Int Med, Oncol)), Wolf v. Bomhard (DVM, Dipl. ECVP), Christian Stockhaus (DVM, Dipl. ECVIM-CA (Int Med))

Dr. Stefanie Mitze, Small Animal Clinic Haar, Haar, Germany
Germany

stefanie1mitze@hotmail.com

Introduction: The FCEAI (Feline Chronic Enteropathy Activity Index) has been established as a quantitative index for disease activity in chronic enteropathies in cats. A definite diagnosis is aimed at histology focusing on the type of the predominant cell infiltrate and as recently emphasized the architectural changes.

Objective: To establish possible correlations between the FCEAI, certain histological architectural changes and cytology, along with cobalamin, folate and albumin.

Materials and Methods: Retrospective case review of 147 cats with chronic enteropathies. The FCEAI has been established and endoscopy performed including biopsies and duodenal cytology. Histopathologic reports have been reviewed for the diagnosis of lymphoma and architectural changes (epithelial integrity, villi/gland atrophy, intestinal crypt atrophy, lymphangiectasia, epitheliotropism, infiltration of intraepithelial lymphocytes). A cytopathologic and histopathologic score regarding lymphocytic intestinal infiltration has been assigned. Statistical dependency analysis was used to determine correlations between the FCEAI, lymphoma, architectural changes, cytopathologic and histopathologic score, cobalamin, folate and albumin.

Results: The 147 cats included predominately European shorthair (n=126), being on average 9.8 (1-17) years old and primarily castrated (n=127). For the proven lymphoma group (12.2% (n=18)) and the non-lymphoma group an average FCEAI of 7.3 and 6.6 could be established respectively. The FCEAI showed low correlation with the cytopathologic score (R=0.21; P=0.015) and high correlation with the intestinal villi atrophy (n=121; P=0.003; R=-0.80). Cats with a cytopathologic score of 0 had a significant lower FCEAI score (P= 0.015) than all other cytopathologic scores. The histo- and cytopathologic scores were highly related (R=0.48; $P<0.001$). The gastric intraepithelial lymphocytic infiltration (n=131) was significantly correlated to folate (P=0.01; R=-0.56) and albumin (P<0.05; R=-0.20). A low albumin was significantly correlated to a higher cytopathologic score (P=0.05).

Conclusion: The FCEAI, folate and albumin showed clear correlations with histological architectural changes and therefore are promising clinical parameters in chronic enteropathies in diagnosis and prognosis.