Hematology/Biochemistry

The most interesting finding in this cat was the marked eosinophila in combination with mild, hyperchromic and macrocytic non-regenerative anemia. Moderate anisocytosis and polychromasia were present as well as moderate neutrophilia.

Sonography

In the ultrasonographical examination, a hypoechogenic mass was detected in the cranial abdomen, not connected to any organ. There were signs of free fluid (however too little for punctation) and evidence for peritonitis. After sedation, a true cut biopsy was performed for further analysis of the mass.



Figure 4. True cut biopsy in a 14-years old European Shorthair cat with mass in the cranial abdomen

Cytology

A slide for cytological examination of good quality and moderate cellularity was prepared. There was a basophilic, proteinous background including some fat droplets and moderate numbers of erythrocytes in the background. The cytological picture was dominated by a high number of eosinophilic granulocytes. Occasionally, there were segmented neutrophilic granulocytes and small, mature lymphocytes. There was no evidence for mast cell tumor or lymphoma.

Histopathology

Due to the unspecific cytological results, the sample gained by true-cut biopsy was sent to histopathology (Institute of Veterinary Pathology, Freie Universität Berlin, Germany). A massive,

eosinophilic lymphadentitis was diagnosed. Mast cell tumors or lymphoma were excluded as potential differential diagnosis and FGESF stated as the most likely diagnosis.

Diagnosis

Feline gastrointestinal sclerosing fibroplasia (FGESF)

Discussion

A literature review describing 13 cases and reviewing the emerging clinical entity of cats with FGESF defined the disease by the presence of eosinophilic mass(es) affecting stomach and/or intestines and draining regional lymph nodes.¹ It has been diagnosed in cats in the USA, Japan, Europe and, most recently, New Zealand.²⁻⁶ Cats of Ragdoll breed were significantly overrepresented among the 13 cats included in the study.¹ The diseases was most often seen in middle-aged cats (median 7 years, range 5-9 years) and was usually associated with a long history of gastrointestinal signs (vomiting and/or diarrhea). The pathogenesis is up to date unknown, there is no evidence that feline Coronavirus, feline Herpesvirus-1 or a single bacterial species lead to development of disease.

The most common clinical findings in the 13 cats of the study were chronic vomiting and diarrhea (91%), weight loss (77%) and lethargy (62%). Typically, there is a large, hard, non-painful and easily palpable mass near the pylorus or ileocaecocolic junction. Hematological findings were highly variable in the 13 cats in the study. Three cats showed thrombocytopenia, two cats were anemic. Leukocytosis was present in four cats and eosinophilia in five cats.

Histopathology most often revealed mixed but predominantly eosinophilic inflammation and although typically characteristic, could be misdiagnosed as osteosarcoma or fibrosarcoma.¹ There was a discussion about the differentiation of FGESF from sclerosing mast cell tumors.⁷⁻⁹ Commonly, bacteria were detected within the masses.¹ The prognosis was stated as poor. A multimodal approach to therapy of FGESF including immunosuppressive and antimicrobial drugs were stated as ideal.¹

Prognosis

Poor.

Treatment and outcome

The cat was treated with Prednisolone (1 mg/kg bodyweight q12h orally), Cyclosporine (20 mg/kg bodyweight q24h orally), Amoxicillin-clavulanic-acid (12.5 mg/kg bodyweight q12h orally) and Buprenorphine (0.2 ml q8h transmucosal). Due to regression of clinical signs, the cat was euthanized two weeks after diagnosis.

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