Cat, 14 years, castrated male, ESH. Eosinophilia with lethargy and inappetence.

Ingo Schäfer¹, Elisabeth Müller¹, Kerstin Thoren-Tolling¹, Barbara Kohn²

Signalement

European Shorthair, castrated male, 14 years.

Anamnesis

The cat was living indoors and was regularly vaccinated and dewormed. There were no other cats in the household. The cat was presented to the Clinic for Small Animals, Freie Universität Berlin, with a two to three weeks history of lethargy and inappetence. There were no known underlying diseases.

Clinical findings

The cat showed impaired general condition, but was able to stand and walk. The mucous membranes were pale pinkish and moist, the capillary refill time was below one second. The rectal temperature was 39.4 °C. The abdomen was tender and non dolent.

Laboratory findings

 Table 1. Hematology results (Sysmex XT-2000i, Sysmex Deutschland GmbH, Norderstedt, Germany)

Parameter	Value	Reference interval	Unit	
WBC	36.92	6-11	6-11 X 10 ⁹ /L	
RBC	4.92	5-10	X 10 ¹² /L	
HGB	9.3	9-15	g/dL	
НСТ	0.28	0.3-0.44	L/L	
MCV	57.1	40-55 fL		
МСН	18.9	13-16	g/dL	
МСНС	33.1	31-36	g/dL	
PLT	356	180-550 X 10 ⁹ /L		

¹ Laboklin GmbH & Co. KG., Steubenstraße 4, 97688 Bad Kissingen, Bavaria, Germany

² Clinic for Small Animals, Faculty of Veterinary Medicine, Freie Universität Berlin, Berlin, Germany Corresponding author: Ingo Schäfer, phone +49 971 7202 0, mail: i.schaefer@laboklin.com

 Table 2. Hematology results obtained by a manual differential count

Parameter	Value	Reference interval	Unit
Seg. neutrophils	18.1	3-11	X 10 ⁹ /L
Band neutrophils	0	0	X 10 ⁹ /L
Lymphocytes	3.7	1-4	X 10 ⁹ /L
Monocytes	4.4	0.04-0.5	X 10 ⁹ /L
Eosinophils	10.7	0.04-0.6	X 10 ⁹ /L
Basophils	0	0-0.04	X 10 ⁹ /L
Anisocytosis	++	negative -	
Polychromasia	++	negative -	
Reticulocytes (aggregated)	0.5%		
Reticulocytes (punctated)	0.8%		
Heinz bodies	5%	-	-

 Table 3. Biochemical results (Access-Analyzer Kone Lab 30i, Thermo Clinical Labsystem, Dreieich, Germany)

Parameter	Value	Reference interval	Unit
Sodium	154	145-158	mmol/L
Potassium	3.61	3.6-4.8	mmol/L
Chloride	115	110-130	mmol/L
Glucose	7.9	5-10	mmol/L
Creatinine	118	53-168	μmol/L
Urea	4.9	5-11.3	mmol/L
Calcium	2.3	2.3-3	mmol/L
Phosphorus	1.24	0.9-1.9	mmol/L
ALT	43	< 70	U/L
АР	19	< 76	U/L
AST	27	< 30	U/L
Bilirubin	3.4	0-3.4	μmol/L
Total Protein	63.2	57-78	g/L
Albumin	30.9	26-40	g/L

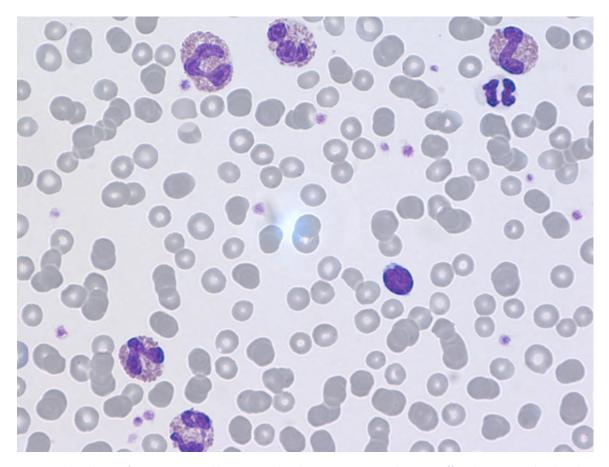


Figure 1. Blood smear from a 14 years old European Shorthair cat, Romanowski stain, Diff-Quik, Haema-Schnell-Färbesatz, Henry Schein VET GmbH, Hamburg, Germany)

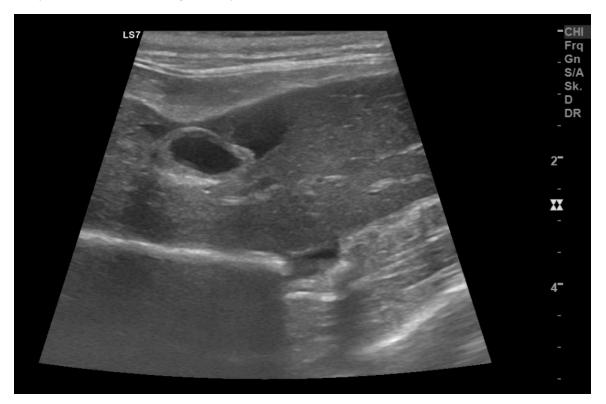


Figure 2. Free fluid around the gall bladder and ventocaudal of the liver in a 14 years old European Shorthair cat

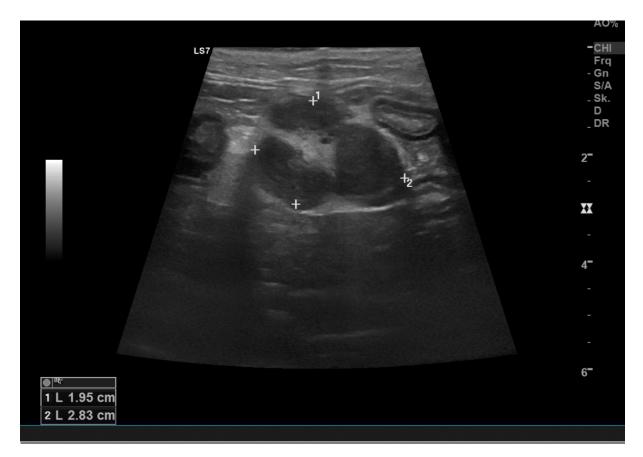


Figure 3. Mass effect in the canial abdomen of a 14 years old European Shorthair cat

Questions

What are the differential diagnosis causing marked eosinophilia in cats?

What is the most likely differential diagnosis in this cat taking anamnesis, general examination, hematology, biochemistry and ultrasonographical findings in consideration?