

Souvenirs from abroad

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Anamnesis

A six-year-old, female spayed European Shorthair Cat living indoors was presented to a small animal practice in Germany due to lethargy, weight loss (2.8 kg body weight) and ulcerative lesions on the front limbs. The cat was imported from Spain to Germany two years ago. Initially, there was moderate gingivitis and sneezing at first presentation after import. The cat was tested positive for Calicivirus by PCR in the commercial laboratory LABOKLIN (Bad Kissingen, Germany). One year ago, respiratory signs worsened, an endoscopy was performed with chronic rhinitis as diagnosis. The cat was treated with doxycycline (Doxybactin® 50 mg tablets, Dechra, 10 mg/kg once daily orally), meloxicam (Metacam® 0.5 mg/ml suspension for use in cats, Boehringer-Ingelheim, 0.1 mg/kg once daily orally) and inhalation of dexamethasone (50 ml dexamethasone 2% with 500 ml sodium chloride). Three months after starting corticosteroid treatment, ulcerative lesions were recognized by the owner on both front limbs, as well as corneal opacity (Figure 1).

General examination

In general examination, nasal stridor and a high-grade gingivitis were seen. Dorsal of the carpal joints, ulcerative lesions were recognized (Figure 1). Besides this, parameters of general

examination were unremarkable (e. g. rectal temperature 38.8 °C; pulse frequency 148/minute, no lymph adenomegaly). In ophthalmological examination, the cornea of the oculus dexter showed mild edema and neovascularization with moderate amounts of aqueous flare. Applanation tonometry was used for measurement of intraocular pressure and revealed 18 and 16 mmHg for the oculus dexter and oculus sinister, respectively.

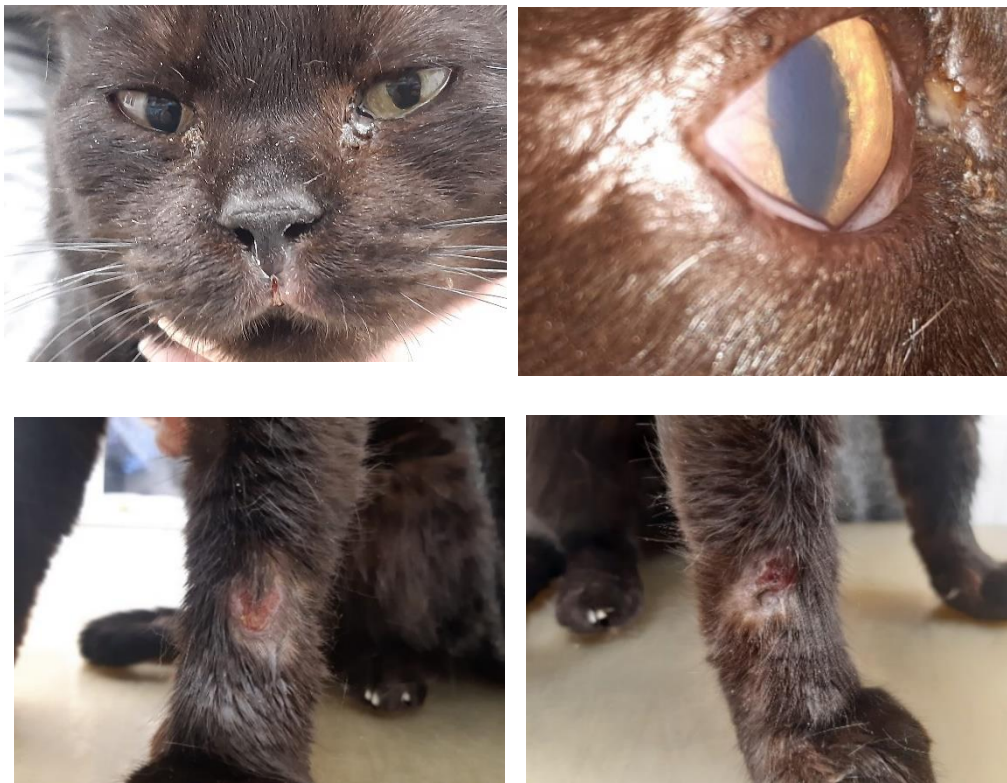


Figure 1: Clinical presentation of a six-years-old, female-spayed European Shorthair Cat imported from Spain to Germany

Blood work

Table 1: Hematological and biochemical parameters in a six-years-old, female-spayed European Shorthair Cat imported from Spain to Germany

Parameter	Reference interval	Day 0
Hematology (ADVIA 2120i, Siemens Healthineers)		
Erythrocytes ($\times 10^{12}/\text{l}$)	5.0 – 10.0	5.82
Hemoglobin (g/l)	90 – 150	96
Hematocrit (l/l)	0.3-0.44	0.32
Reticulocytes ($\times 10^9/\text{l}$)	< 60.0	64.6
Reticulocyte hemoglobin content (pg)	> 11.5	16.9
Leukocytes ($\times 10^{12}/\text{l}$)	6.0 – 11.0	13.7
Segmented granulocytes ($\times 10^9/\text{l}$)	3.0 – 11.0	7.1
Banded neutrophilic granulocytes ($\times 10^9/\text{l}$)	< 0.6	0.0
Lymphocytes ($\times 10^9/\text{l}$)	1.0 – 4.0	5.9
Eosinophils ($\times 10^9/\text{l}$)	0.04 – 0.6	0.0
Monocytes ($\times 10^9/\text{l}$)	0.04 – 0.5	0.7
Hypochromasia	Negative	Neg.
Anisocytosis	Negative	Neg.
Platelets ($\times 10^9/\text{l}$)	180 - 550	175
Biochemistry (Cobas 8000, Roche)		
Alpha-Amylase (U/l)	< 1,850.0	1,291.0
DGGR-lipase (U/l)	< 26.0	18.3
Glucose (mmol/l)	3.1 – 6.9	5.3
Fructosamine ($\mu\text{mol/l}$)	< 340.0	212.0
Triglycerides (mmol/l)	< 1.14	1.2
Cholesterol (mmol/l)	1.8 – 3.9	5.1
Bilirubin ($\mu\text{mol/l}$)	< 3.4	1.1
Alkaline phosphatase (U/l)	< 140.0	16.0
Glutamate dehydrogenase (U/l)	< 6.0	1.8
Gamma-glutamyl transferase (U/l)	< 5.0	< 0.1
Alanine transaminase (U/l)	< 70.0	18.2
Aspartate aminotransferase (U/l)	< 30.0	20.9
Creatin kinase (U/l)	< 130.0	38.0
Total Protein (g/l)	57.0 – 94.0	85.9
Albumin (g/l)	26.0 – 56.0	28.9
Globulin (g/l)	< 55.0	57.0
Urea (mmol/l)	5.0 – 11.3	5.4
Creatinine ($\mu\text{mol/l}$)	< 168.0	92.0
Phosphorus (mmol/l)	0.8 -1.9	1.9
SDMA ($\mu\text{mol/l}$)	< 0.75	-
Magnesium (mmol/l)	0.6 – 1.3	0.9
Calcium (mmol/l)	2.3 – 3.0	2.7
Sodium (mmol/l)	145.0 – 158.0	155.0
Potassium (mmol/l)	3.0 – 4.8	5.0
Iron ($\mu\text{mol/l}$)	8 – 31	7.9
Serum Amyloid A ($\mu\text{g/l}$)	< 6.7	77.4

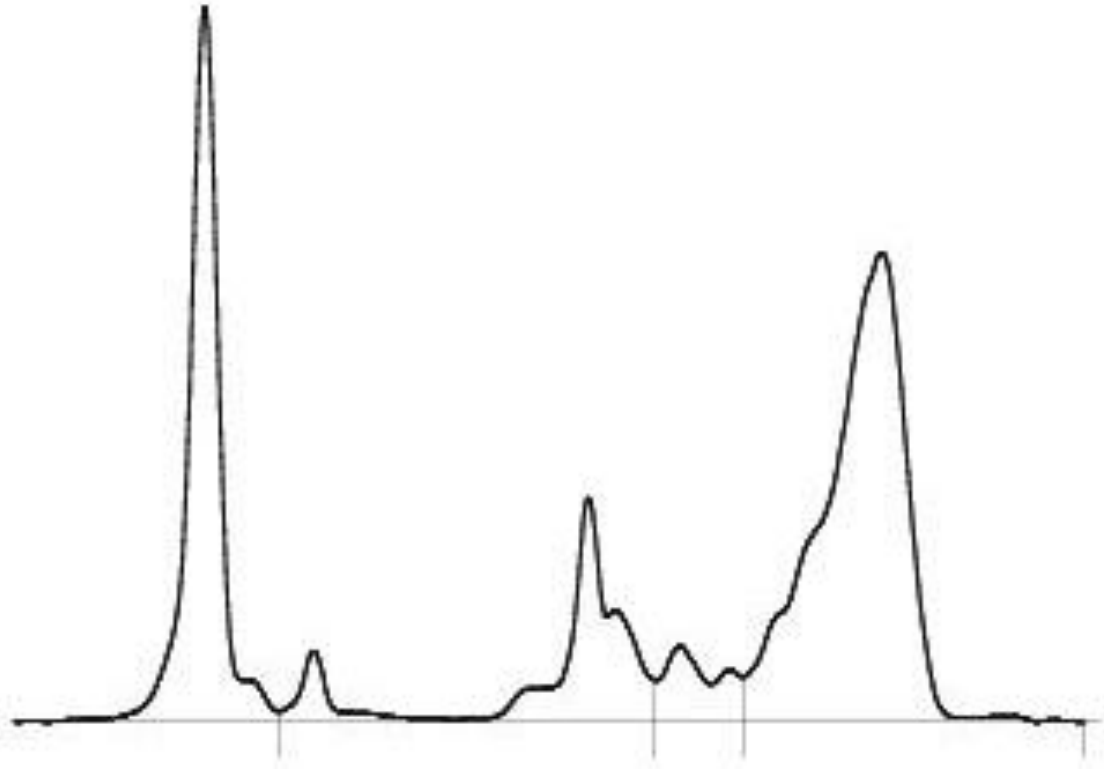


Figure 2: Serum protein capillary electrophoresis (Sebia Minicap, Sebia) in a six-years-old, female-spayed European Shorthair Cat imported from Spain to Germany

Questions

- Please list the hematological and biochemical abnormalities with your differential diagnosis.
- Please interpret the electrophoresis and give your main differentials.
- Which further testing would you recommend?