

MASTOCYTHEMIA IN A FELINE - CASE REPORT

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INTRODUCTION

Mastocytomia is characterized by the presence of circulating mast cells identified in a blood smear or buffy coat. It is a rare anomaly reported in only 0.05 to 0.33% of cats and is most often associated with visceral mastocytoma.

It is known that the presence of circulating mast cells in dogs is more common and is associated with cases of inflammation, regenerative anemia, neoplasms, trauma, necrosis and tissue injury.

Mastocytoma affects around 2 to 15% of cats, the main forms being visceral and cutaneous, which affect the head, neck and trunk, accounting for around 21% of skin tumors in this species. In addition to its systemic hematopoietic form, which affects the liver, bone marrow and spleen, the latter being the most affected (15%), the alimentary tract is also commonly affected.

CASE REPORT

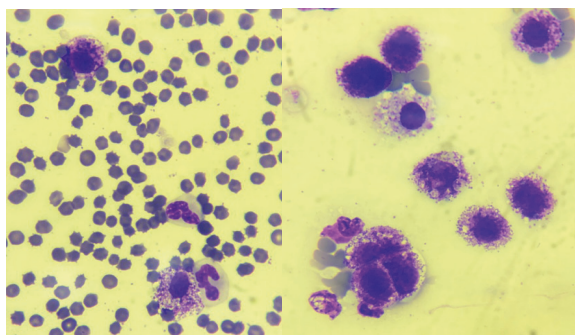
A 3-year-old male feline of no defined breed, with no history of neoplasia, was referred for clinical care with an initial complaint of prostration, anorexia and emesis. During the physical examination, he was mildly dehydrated, with slightly hypochlorous mucous membranes, auscultation in the lung fields was slightly coarse, body temperature was 36.6 degrees Celsius, and ultrasound examination showed splenomegaly (measuring 1.46 cm thick), nephropathy (renal infarction and hyperechogenicity in the right kidney), enlarged lymph nodes and a slight amount of free fluid. X-rays showed lung opacification and an increase in volume dorsal to the 2nd sternum. The biochemical analysis showed a slight increase in the serum urea level (65.2 mg/dL) and the blood counts are described in the table below (Table 1). Initial clinical suspicion of alimentary lymphoma, azotemia, hypotension and hypothermia.

DEVELOPMENT

Mast cells appear as round cells with an eccentric nucleus and their main characteristic is the presence of purple/blue cytoplasmic granules.

It has been reported that higher absolute circulating mast cell counts are found in younger cats, under 4 years of age. Some authors recommend performing a buffy coat to investigate the presence of mastocytomia in cats with confirmed or suspected visceral mastocytoma and also in patients with splenomegaly or emesis without a confirmed cause.

The most common clinical signs are decreased appetite, emesis, diarrhea and splenomegaly.



Images 1 and 2: Presence of mast cells in a blood smear from a feline patient, stained with rapid panoptic acid.

CONCLUSION

The presence of circulating mast cells in the blood smear of healthy cats or those with no initial suspicion of mastocytomia is extremely rare and implies an important clinical finding. With the help of complementary tests such as cytology, histopathology, US and radiography, it is recommended to investigate the causes of mastocytomia or other possible neoplastic (lymphoma, hemangiosarcoma) or non-neoplastic diseases. It was not possible to investigate the cause of the mastocytomia as the patient died. There are few reports, so mastocytomia should be studied further in this species, as well as its possible correlation with other pathological conditions.

	DIA 1	DIA 2	REFERÊNCIA
Eritrócitos (10xuL)	4,89	5,42	5,00 - 10,00
HCT (%)	20,1	21,6	24,00 - 45,00
Hemoglobina (g/dL)	5,8	7	8,00 - 15,00
VCM (fL)	41,1	39,85	39,00 - 55,00
CHCM (pg)	28,85	32,4	30,00- 36,00
Leucócitos (uL)	39.910	53.850	6.000 - 19.000
Bastonete (uL)	0	539	0 - 570
Neutrófilos segmentados (uL)	23.148	24.771	2.100 - 14.250
Linfócitos típicos (uL)	4.390	539	1.200 - 10.450
Monócitos (uL)	1.596	1.077	60 - 760
Mastócitos (uL)	10.776	26.925	-
Plaquetas (mil/uL)	112*	131*	300 - 700

*Contagem de plaquetas comprometidas devido presença de agregados plaquetários.

Table 1: Description of the two blood counts of the feline patient with mastocytomia.

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