

Sysmex scattergram in a cat
WITHOUT DIAGNOSIS
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Signalment

DSH male cat, 2 years old

History

The cat was presented for acute vomiting and diarrhea, with lethargy, inappetence and adipsia for the past 48 hours, and cutaneous nodules in a context of pyodermitis that had been evolving for months

Clinical findings

On admission, the cat was in good body condition (SC 4/9) but lethargic, tachypneic (RR = 100 bpm) and had marked ptyalism. Clinical examination also revealed a marked flea infestation associated with extensive crusts and papules. Pulmonary auscultation revealed heavy breath sounds in the dorsal region ; the abdominal palpation was painful.

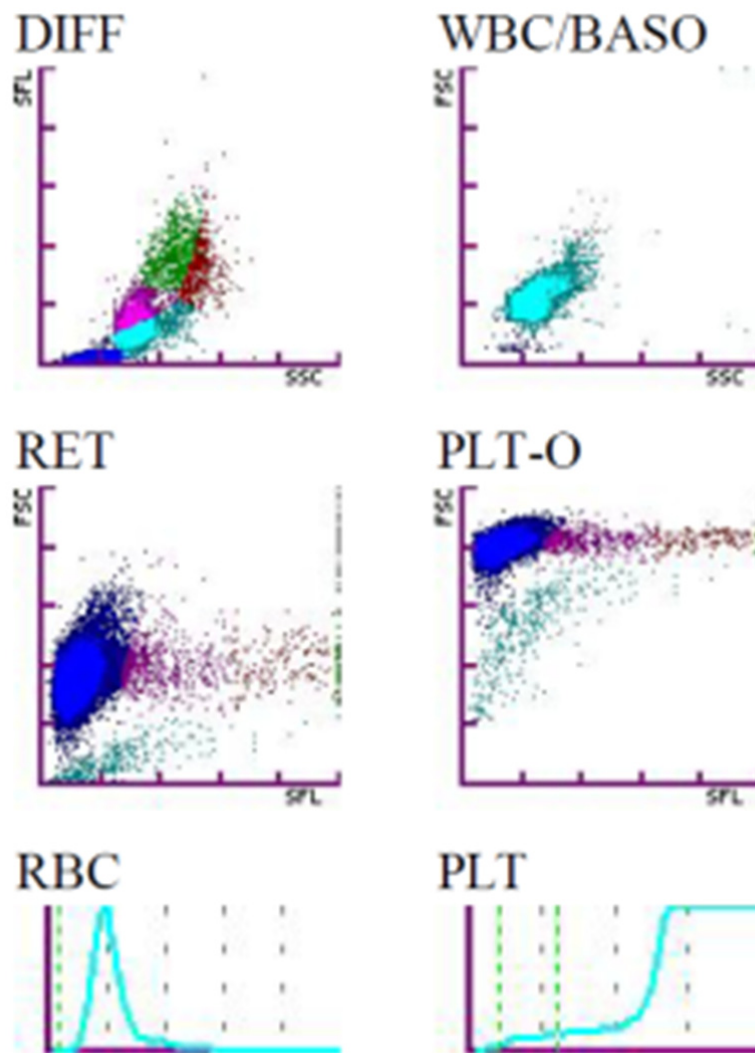
Diagnostic procedures

Thoracic and abdominal X-rays showed an alveolar opacity ; abdominal ultrasound revealed thickening of the muscular layer of the duodenum, with alteration of the layer-structure of the duodenal wall, dilatation of the lumen and hypomotility. Pancreas appeared thickened too, and heterogeneous.

Haematology and biochemistry, fine needle aspirations of cutaneous nodules were performed. Results are shown below.

Hematology

	Value	Reference interval
WBC	14.48.10 ⁹ /L	3.70-18.66
Neutrophils	9.67.10 ⁹ /L	1.45-9.62
Lymphocytes	2.86.10 ⁹ /L	1.18-10.36
Monocytes	1.20.10 ⁹ /L	0.09-0.82
Eosinophils	0.73.10 ⁹ /L	0.16-1.81
Basophils	0.02.10 ⁹ /L	
RBC	5.93.10 ¹² /L	6.72-11.39
Hb	77g/L	98-169
HCT	0.28L/L	0.29-0.48
MCV	47.6 fL	33.6-48.3
MCHC	273 g/L	32.9-39.1
Platelets	61.10 ⁹ /μL	72-457



Biochemistry

	Value	Reference interval
Sodium	156 mmol/L	148-157
Potassium	4.1 mmol/L	3.5-5.1
Chloride	119 mmol/L	115-128
Bicarbonates	22 mmol/L	16-25
Total proteins	57.4 g/L	55-71
Albumin	28.3 g/L	27-39
aPT	19.5 s	9.7-12.1
aPTT	147.4 s	12.5-20.4
Fibrinogen	0.41 g/L	1 – 2.1

Questions

- 1) Do you accept the differential obtained from the Sysmex XT-2000iV?
- 2) Can you explain what is seen on the diff scattergram?

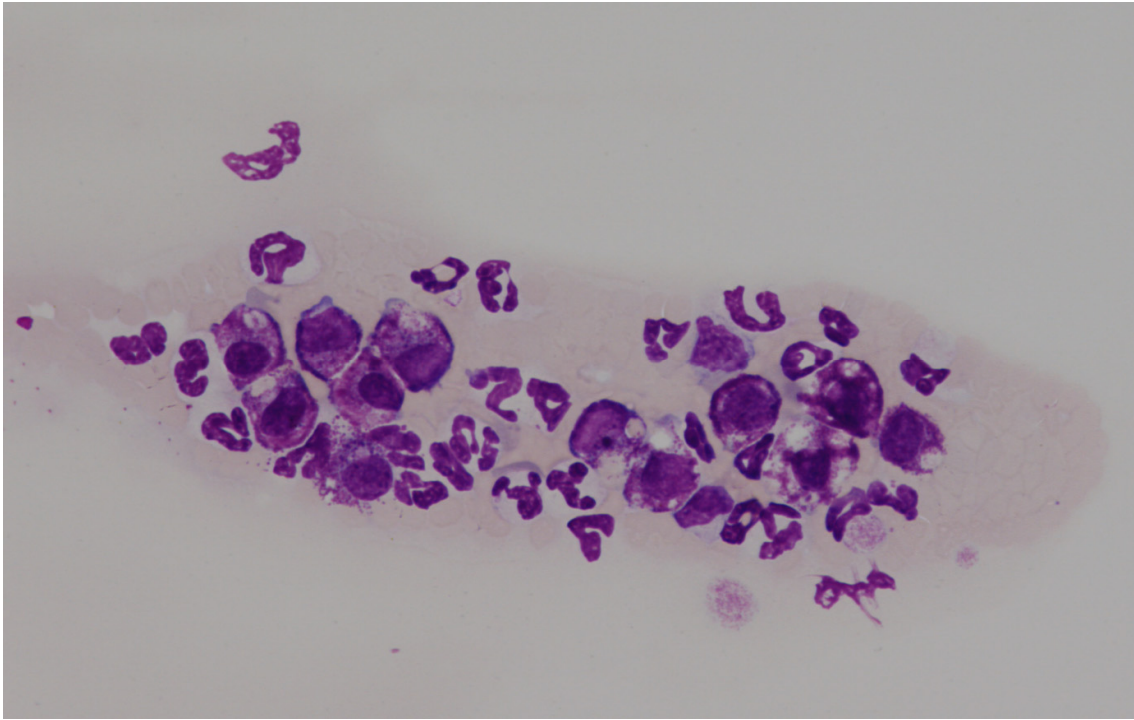


Photo 1 : Peripheral blood. Wright Giemsa stain. Original Magnification x400

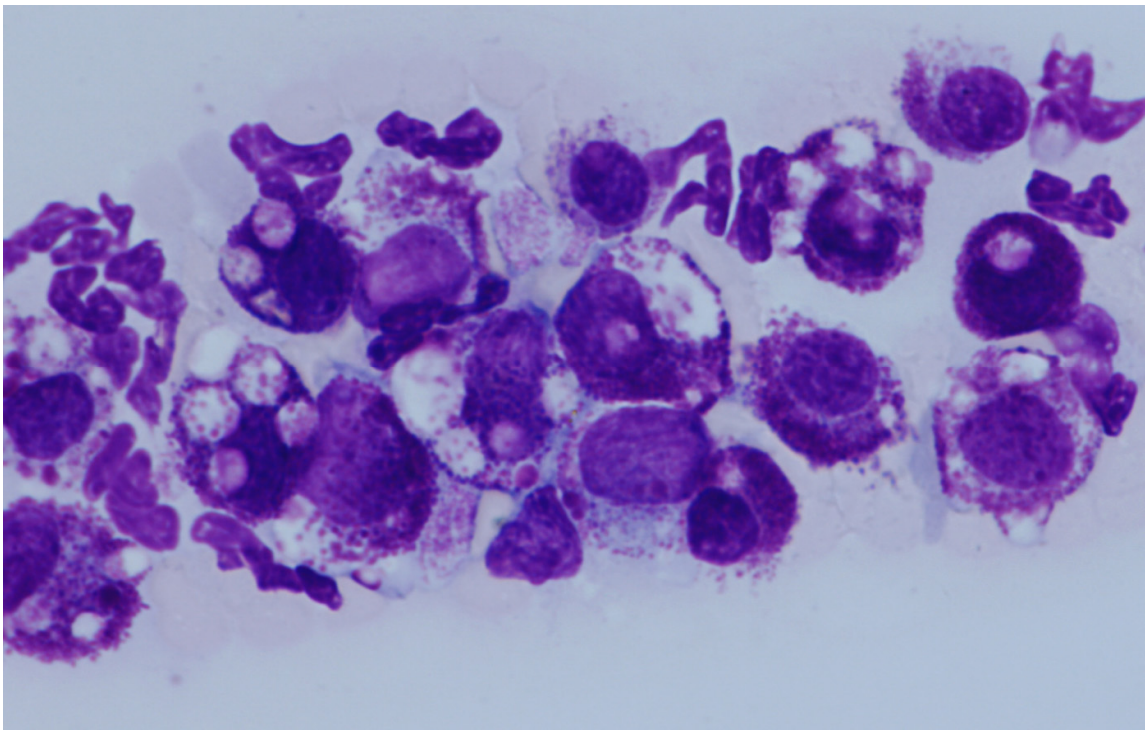


Photo 2 : Peripheral blood. Wright Giemsa stain. Original Magnification x1000

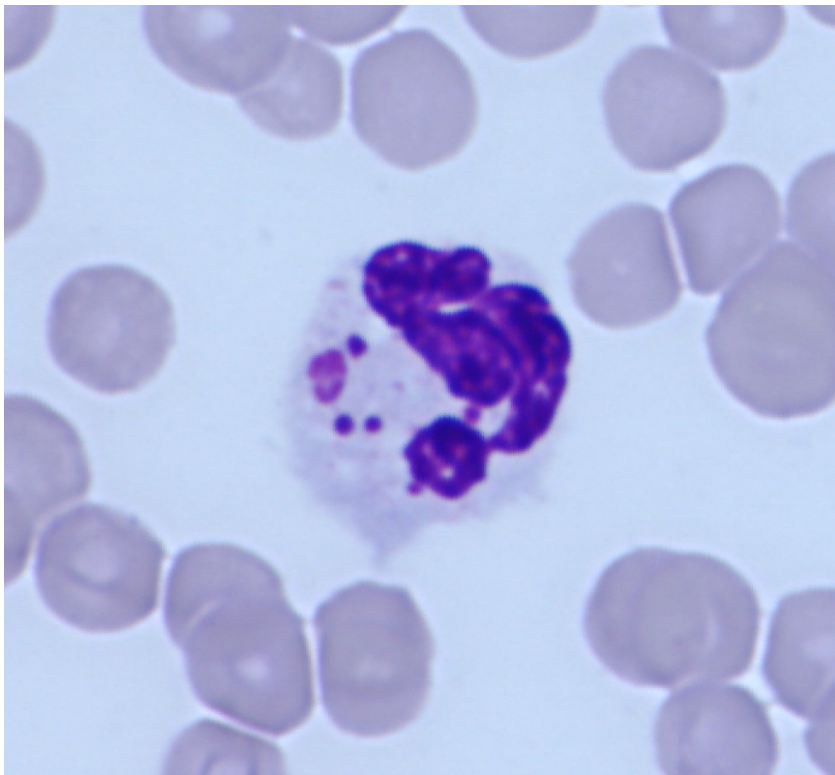


Photo 3 : Peripheral blood. Wright Giemsa stain. Original Magnification x1000

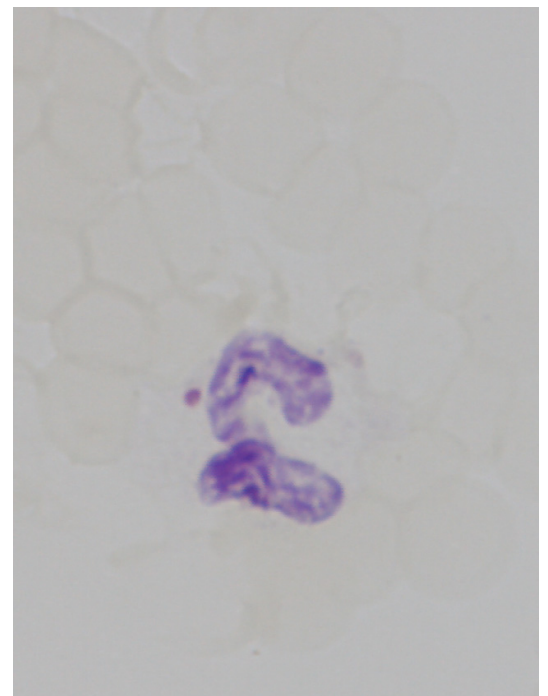
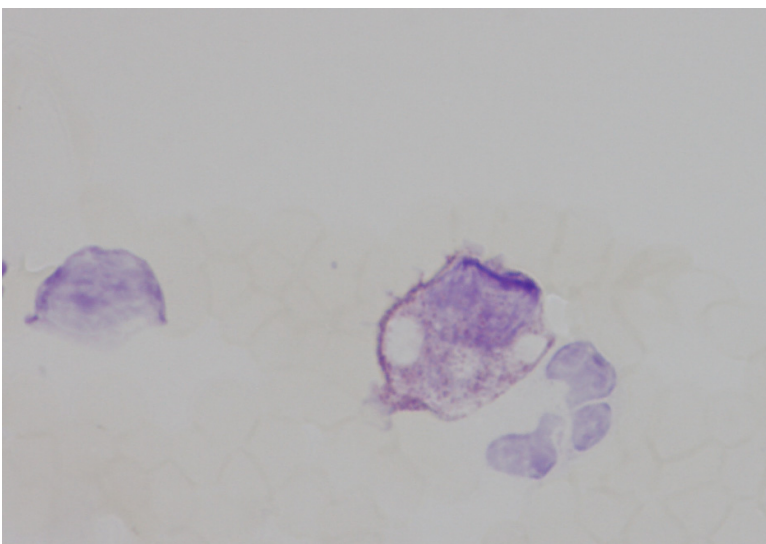


Photo 4a and 4b : Peripheral blood. Toluidine blue stain. Original Magnification x1000