"Doc, he is not feeling well"

Contributors

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SPECIMEN

Abdominal mass - fine needle aspirate biopsy

Signalment

Sled dog, Siberian Husky, male, 6-year-old

History

A 6-year-old sled dog male Siberian Husky presented to perform a CT (Computed Tomography) at the Anicura Clinic for second opinion about multiple abdominal masses. For many years, he was self-managed by sled-dog breeder.

The owner said that "from February 2022 he is not feeling well".

Clinical findings

Clinical findings reported from the clinicians include dysorexia, abdominal pain and weight loss.

Diagnostic procedures

Complete blood count revealed moderate neutrophilic leucocytosis and a slight thrombocytosis (Table 1). Biochemistry was unremarkable (Table 2).

CT revealed a voluminous neoplasm (probably hepatic), hemoabdomen, peritoneal carcinomatosis, lymph nodes and hepatic metastasis (Fig. 1-2). During the procedure, fine needle aspirates of the masses were performed (Fig. 3-6).

Table 1: Haematology results (Procyte Dx, IDEXX Laboratories, Inc., One IDEXX Drive Westbrook, Maine, USA).

Cal	Patient values	Reference intervals (conventional unit)
RBC (M/µL)	5.99	5.65 – 8.87
HCT (%)	40.4	37.3 – 61.7
Hb (g/dL)	14.9	13.1 – 20.5
MCV (fL)	67.4	61.6 – 73.5
MHC (pg)	24.9	21.2 – 25.9
MHCH (g/dL)	36.9	32.0 – 37.9
RDW (%)	14.5	13.6 – 21.7
Reticulocyte (%)	0.7	-
Reticulocyte (K/µL)	39.5	10 – 110
Leucocyte (K/µL)	29.26	5.05 – 16.76
Neutrophils (K/µL)	25.56	2.95 – 11.64
Lymphocytes (K/µL)	1.85	1.05 – 5.10
Monocytes (K/µL)	1.09	0.16 – 1.12
Eosinophils (K/μL)	0.76	0.06 – 1.23
Basophils (K/µL)	0	0 – 0.1
PLT (K/µL)	513	148 – 484

Table 2: Biochemistry results (Catalyst One, IDEXX Laboratories, Inc., One IDEXX Drive Westbrook, Maine, USA).

Analytes (units)	Patient values (units)	Reference intervals (conventional unit)
Glucose (mg/dL)	125	74 – 143
Creatinine (mg/dL)	0.9	0.5 – 1.8
Urea nitrogen (mg/dL)	20	7 – 27
Phosphorus (mg/dL)	5	2.5 – 6.8
Calcium, total (mg/dL)	10.7	7.9 – 12
Total protein (g/dL)	6.8	5.2 – 8.2
Albumin (g/dL)	2.5	2.3 – 4
Globulin (g/dL)	4.3	2.5 – 4.5
ALT (U/L)	41	10 – 125
ALP (U/L)	98	23 – 212
GGT (U/L)	1	0 – 11
Total bilirubin (mg/dL)	0.1	0.0 - 0.9
Cholesterol (mg/dL)	194	110 – 320

Figure 1: Sagittal Computed Tomography (CT)

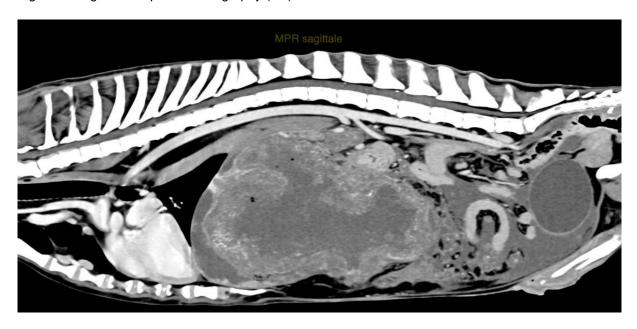


Figure 2: Dorsal Computed Tomography (CT)

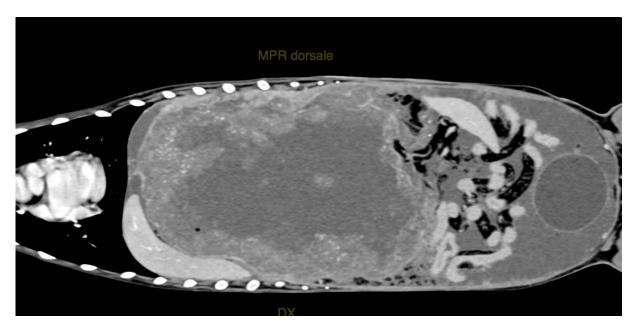


Figure 3: Fine needle aspirate biopsy of the abdominal mass, modified May Grunwald Giemsa stain, 10x objective

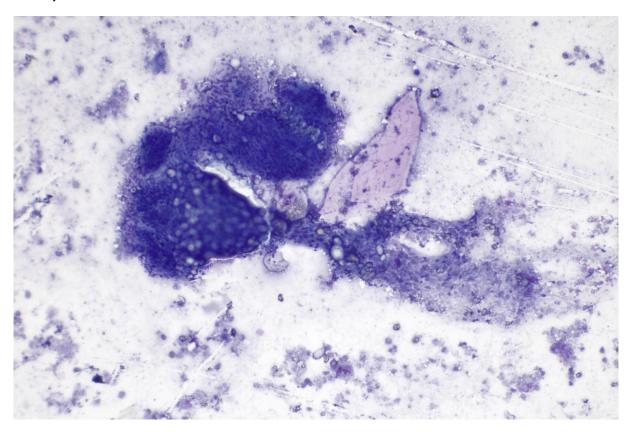


Figure 4: Fine needle aspirate biopsy of the abdominal mass, modified May Grunwald Giemsa stain, 10x objective

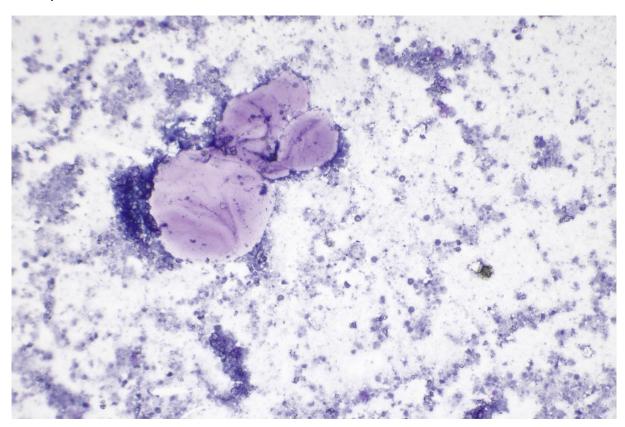
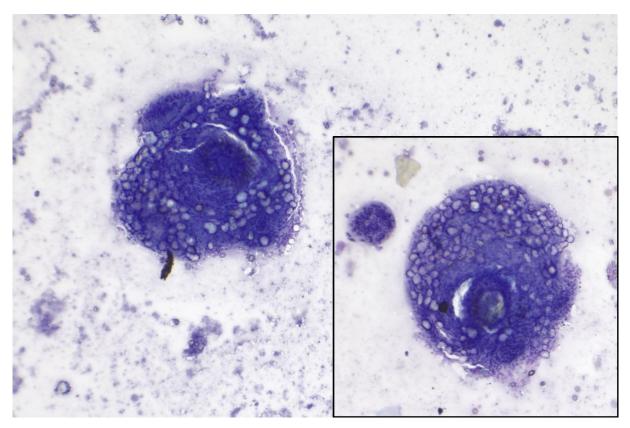


Figure 5 with inset: Fine needle aspirate biopsy of the abdominal mass, modified May Grunwald Giemsa stain, 10x objective



- What is your description of the cytologic findings?
 What do you recognize in Image 5?
 What is your first diagnosis?
 Which additional tests do you suggest to confirm your diagnosis?