

Clinical pathology diagnostic challenge : case #26

Signalment: 9 year old, neutered male spaniel.

History: progressive weakness in the last weeks, weight and appetite loss.

Physical exam observations: weakness, pale mucous membranes, generalized lymphadenomegaly, x-rays reveal hepatomegaly and splenomegaly.

CBC results

Hematocrit (0.37-0.55 L/L)	0.15
Hemoglobin (120-180 g/L)	43
Erythrocytes ($5.5-8.5 \times 10^{12}$ /L)	1.94
MCV (60-77 fL)	77
MCHC (320-360 g/L)	287
Reticulocytes (<1 %)	-
Reticulocytes ($<60\,000 \times 10^6$ /L)	-
Platelets ($200-900 \times 10^9$ /L)	18
Plasma protein (60-80 g/L)	72
Leukocytes ($6.0-17.0 \times 10^9$ /L)	125
Neutrophils (mature) ($3.0-11.5 \times 10^9$ /L)	0
Neutrophils (band) ($0-0.3 \times 10^9$ /L)	0
Lymphocytes ($1.0-4.8 \times 10^9$ /L)	125
Monocytes ($<1.4 \times 10^9$ /L)	0
Eosinophils ($0.1-1.3 \times 10^9$ /L)	0
Basophils (0 - rare $\times 10^9$ /L)	0

Clinical chemistry results

No clinical chemistry was requested in this case.

Other tests

A fine needle pre-scapular lymph node aspiration was done.

Using the laboratory changes, submit a differential diagnosis and justify it (pathophysiology). If needed list other possible tests to confirm your diagnosis.