

Clinical pathology diagnostic challenge : case #33

Signalment: 6 year old neutered male Persian cat.

History: vomiting, complete anorexia for a week.

Physical exam observations: icterus and ascites.

CBC results

Hematocrit (0.24-0.45 L/L)	0.31
Hemoglobin (80-150 g/L)	123
Erythrocytes ($5.0-10.0 \times 10^{12}$ /L)	7.62
MCV (39-55 fL)	41
MCHC (300-360 g/L)	397
Reticulocytes (<1 %)	-
Reticulocytes ($<60\,000 \times 10^6$ /L)	-
Platelets (300-700 $\times 10^9$ /L)	adequate
Plasma protein (60-80 g/L)	84
Leukocytes ($5.5-19.5 \times 10^9$ /L)	7.5
Neutrophils (mature) ($2.5-12.5 \times 10^9$ /L)	5.2
Neutrophils (band) ($0-0.3 \times 10^9$ /L)	0
Lymphocytes ($1.5-7.0 \times 10^9$ /L)	1.9
Monocytes ($<0.8 \times 10^9$ /L)	0.3
Eosinophils ($0-1.3 \times 10^9$ /L)	0.2
Basophils (0 - rare $\times 10^9$ /L)	0

Clinical chemistry results

Glucose (3.8-7.9 mmol/L)	4.6
BUN (4.1-10.8 mmol/L)	3.2
Creatinine (51-180 μ mol/L)	91
ALT (16-63 U/L)	98
Alkaline phosphatase (<50 U/L)	147
Total protein (59.6-80.8 g/L)	87.1
Albumin (26.0-39.0 g/L)	28.4
Globulins (29.0-47.0 g/L)	58.7
Calcium (2.17-2.86 mmol/L)	2.34
Phosphorus (0.96-1.96 mmol/L)	1.32
Potassium (3.60-5.30 mmol/L)	4.38
Sodium (145-158 mmol/L)	150.1
Chloride (110-125 mmol/L)	114.7
Total C02 (14-24 mmol/L)	19.5
Anion Gap (10-27 mmol/L)	20.28

Other tests

Hepatic cytology

An ultrasound fine needle 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.