

## Case 4

### **FNA of an abdominal mass in a polyuric and polydipsic dog.**

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#### **SIGNALMENT, HISTORY AND CLINICAL FINDINGS**

Saydee, a 9-years-old neutered female Old English Sheepdog was presented to the QVSH for further investigation of progressive epistaxis, panting, waxing and waning polyuria and polydipsia, elevated liver enzymes (ALT and ALP), and intermittent anorexia of 1 month's duration. The referring vets had found no evidence of clotting disorders (APTT and PT were within limits). Abdominal radiography had revealed a mass. A previous ACTH stimulation test was within normal limits.

On clinical examination, Saydee was slightly overweight (46 kg). She was responsive but nervous. She had an elevated blood pressure and her abdomen felt distended.

A low dose dexamethasone suppression test showed basal cortisol of 89 nmol/L (reference: < 250 nmol/L), cortisol 3 hrs post dexamethasone of 121 nmol/L (reference: 50% suppression), and cortisol 8hrs post dexamethasone of 79 nmol/L (reference: <40 nmol/L). The urine cortisol:creatinine ratio was  $141 \times 10^6$  (reference 0 – 30). The baseline plasma aldosterone concentration was < 20 pmol/L (reference: < 960 pmol/L). A biochemistry screening profile was unremarkable, with normal electrolytes and calcium, but ALT and ALP were elevated (505 IU/L and 565 IU/L respectively). Glucose was only mildly elevated (7.2 mmol/L; reference: 3.4 – 5.3). On CBC, there was leukocytosis with mature neutrophilia. The spun PCV was within the reference interval (38%).

Abdominal ultrasound and radiography revealed a large mass (6 x 8 cm) associated with an enlarged right adrenal gland, close to the caudal vena cava. The left adrenal gland appeared focally enlarged. Heterogeneous lesions were found throughout the liver and spleen.

Ultrasound-guided fine needle aspirates of the adrenal mass and liver were carried out.

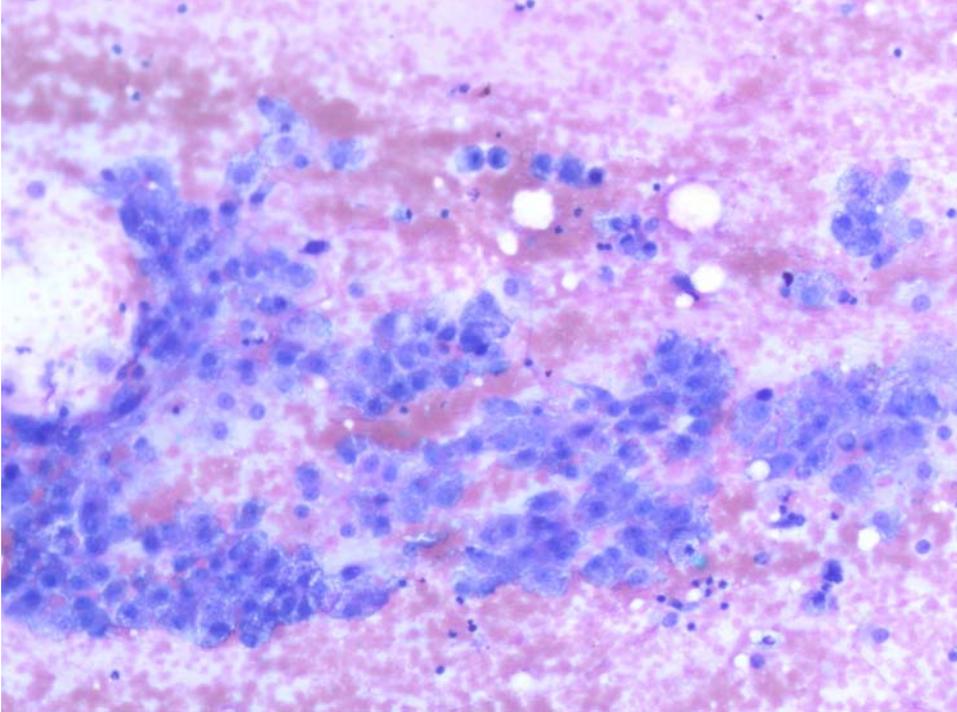


Figure 1. Adrenal mass – Wright's Giemsa. (10x)

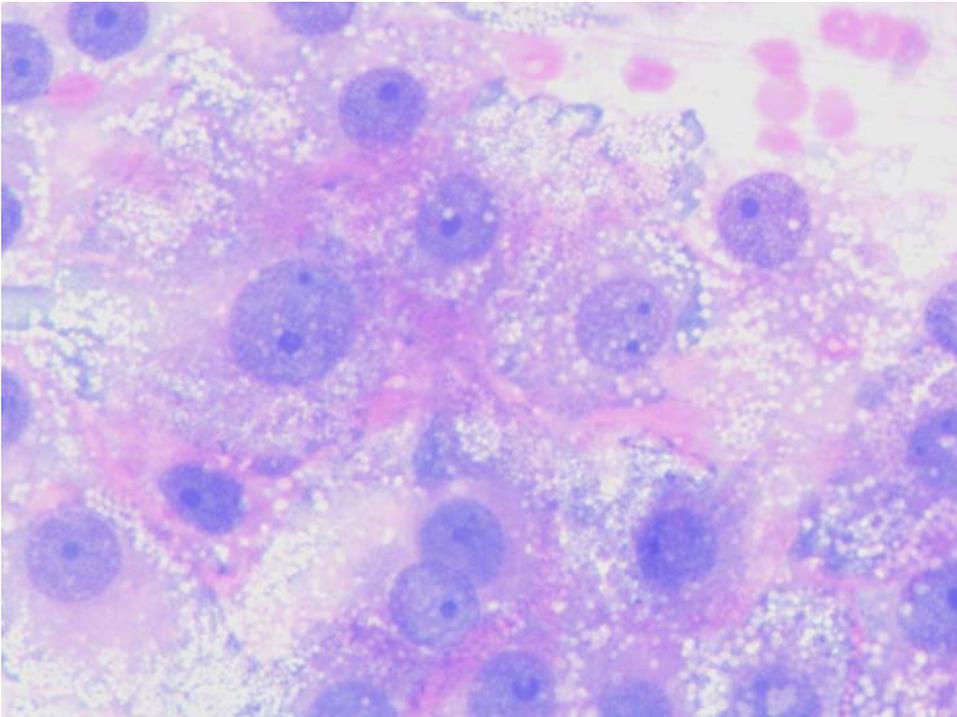


Figure 2. Adrenal mass – Wright's Giemsa. (50x)

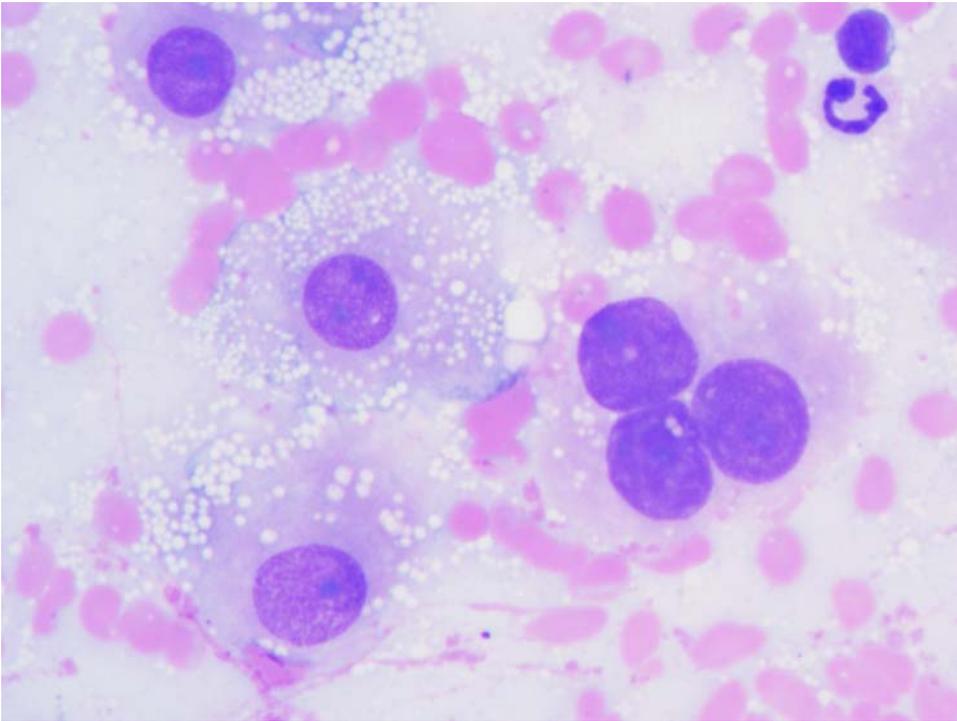


Figure 3. Adrenal mass – Wright's Giemsa. (50x)

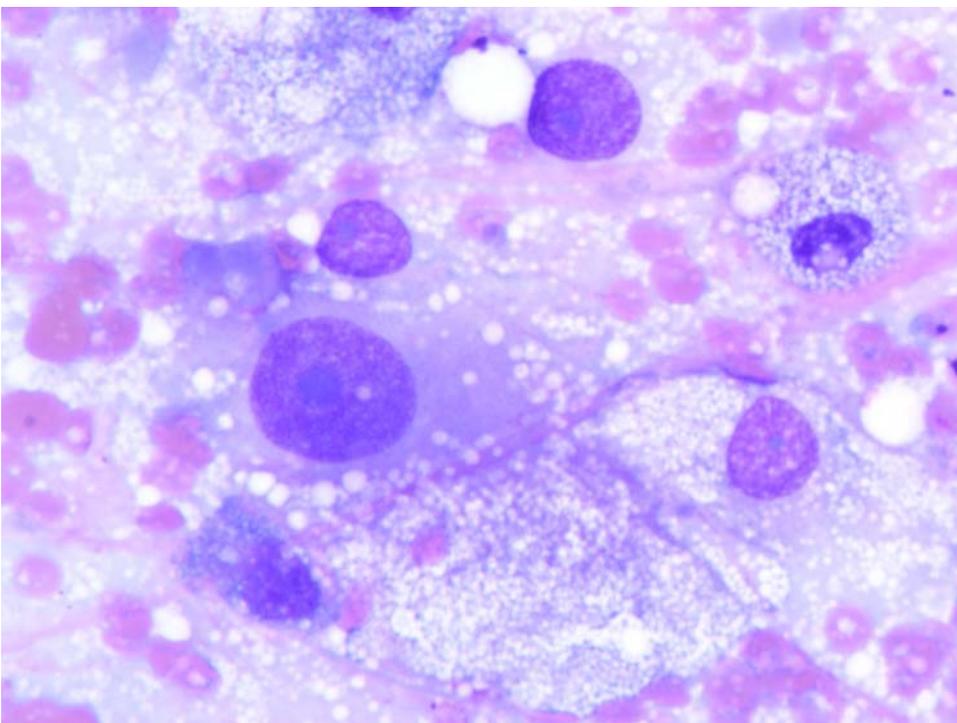


Figure 4. Adrenal mass – Wright's Giemsa. (50x)

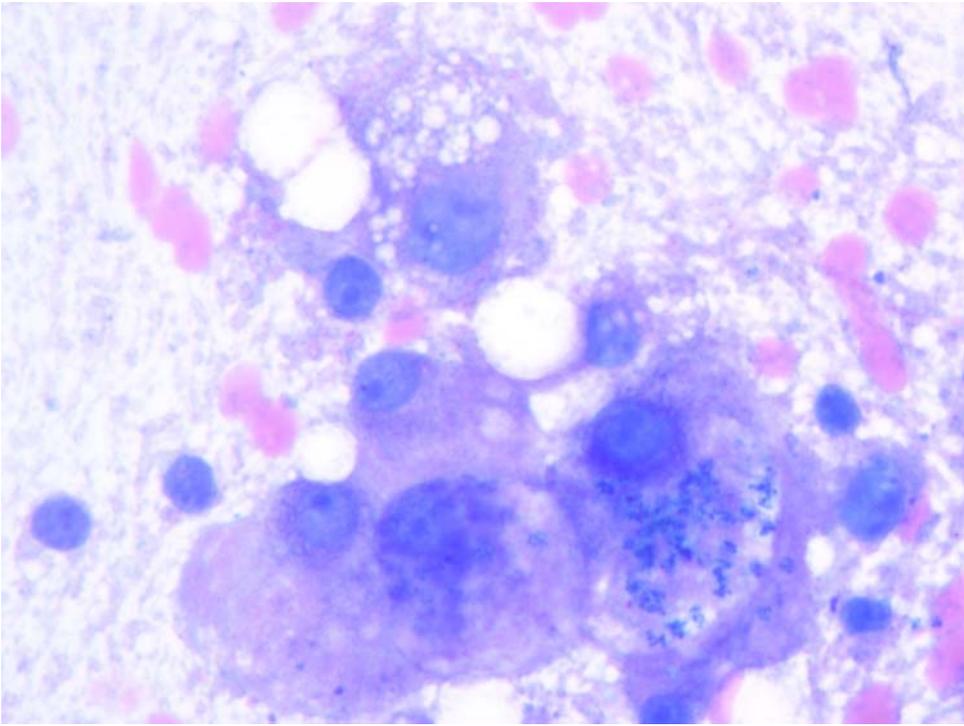


Figure 5. Liver - Wright's Giemsa. (50x).

Question

What is your cytologic diagnosis?