

**DATE PRESENTING CLINICAL SIGNS**

2/2/22

History: p presented on 1/25/22 for panting all the time. the 1st time p presented for this issue at NWAH was 4/20, and at the time, thoracic radiographs were performed and revealed mild bronchitis. p was treated with steroids and antibiotics at that time, but o noted no improvement. most recent bloodwork revealed an increase in ALP, so there is a concern for Cushing's DZ.

**PATIENT**

Oreo Storm

**SPECIES**

Canine

Lab Results: 1/25/22 ALT 245, ALP 405, T4 7.0, pending LDDT, Free T4.  
Radiographs: 1/25/22 WNL.  
Date of Previous IntraPet Ultrasound: No previous IntraPet scans.  
Sedation: Not required to complete full diagnostic ultrasound.  
Stat Report: Not requested.

**BREED**

Mixed

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN****SEX**

Neutered Male

**Urinary System**

The urinary bladder is moderately distended with anechoic contents. No masses, inflammatory changes, echogenic sediment or cystoliths are observed. The urinary bladder, trigone and visible pelvic urethra are normal in thickness with a smooth mucosal surface.

**AGE**

3/2/16

Prostate (neutered) is normal in size, echotexture and echogenicity for a neutered male.

**WEIGHT**

89 Pounds

The right kidney is normal in size (9.68 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed.

**INTERPRETED BY**Beth Johnson, DVM  
DACVIM

The left kidney is normal in size (9.25 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed.

**IMAGING PERFORMED BY**Stephanie Pearce  
RDCCS, RVT**Adrenal Glands**

The left adrenal gland is normal in size (3.47 cm long x 0.76 cm at the cranial pole and 0.69 cm at the caudal pole), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

**HOSPITAL NAME**

Northwind AH

The right adrenal gland is normal in size (3.56 cm long x 1.1 cm at the cranial pole and 1.0 cm at the caudal pole), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

**REFERRING VET**

Dr. Wilson

**Spleen**

The spleen is subjectively normal in size with a normal smooth capsular contour. Parenchyma is appropriately finely textured and homogenous with normal echogenicity relative to surrounding tissue (hyperechoic to liver). No focal nodules or masses are observed. Splenic vasculature appears normal.

**INVOICE**

35398

**Liver**

The liver is subjectively normal in size with normal smooth curvilinear peripheral contour. Parenchyma is appropriately hypoechoic to the spleen in echogenicity and appropriately mildly coarse and homogenous in echotexture. No focal lesions are observed. Visible vasculature and biliary tree appear normal without distension or congestion.

The gallbladder is non-distended in size. The wall is smooth without visible thickening. Luminal contents are primarily anechoic. There is no evidence of cystic or common bile duct dilation.

### ***Gastrointestinal***

The stomach wall is normal in thickness (canine < 0.5 cm and feline < 0.4 cm) and layering. The lumen of the stomach is moderately distended with very echogenic reverberation artifact from intraluminal gas. There is no evidence of obstruction, foreign material or infiltrative disease; however, complete visualization of far wall is partially inhibited by gas. Pyloric outflow tract appears patent.

The visible small intestines are normal in wall thickness and layering (canine duodenum < 0.5 cm and feline duodenum < 0.4 cm; other < 0.3 cm). Small intestinal motility appears adequate (1-3 contractions per min). The lumen of the small intestine is empty with no evidence of obstruction, foreign material or infiltrative disease.

The visible colon is normal in wall thickness (< 0.2 cm) and layering. Contents are consistent with normal formed feces and gas.

### ***Pancreas***

The pancreatic parenchyma is appropriately isoechoic to surrounding tissue. Visible capsule is smooth and normal in contour. There is no visible pancreatic duct dilation. There is no evidence of active peripancreatic inflammation.

### ***Free Abdomen***

There is no evidence of peritoneal effusion. There is no apparent lymphadenopathy.

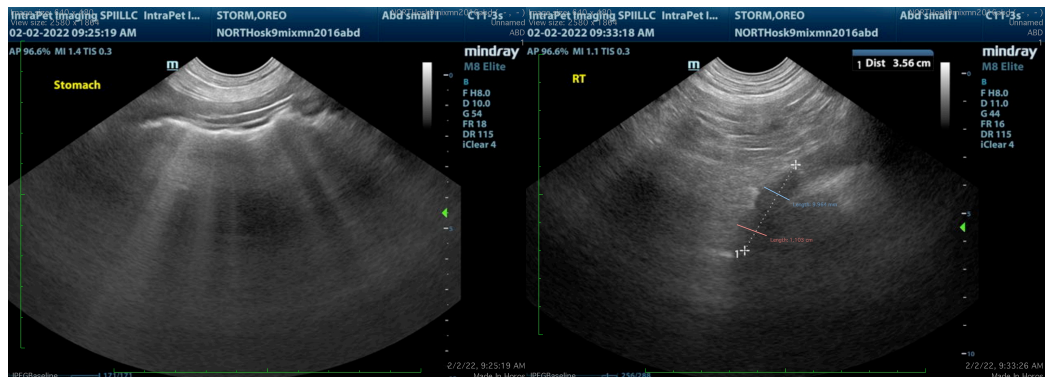
## **ULTRASONOGRAPHIC FINDINGS**

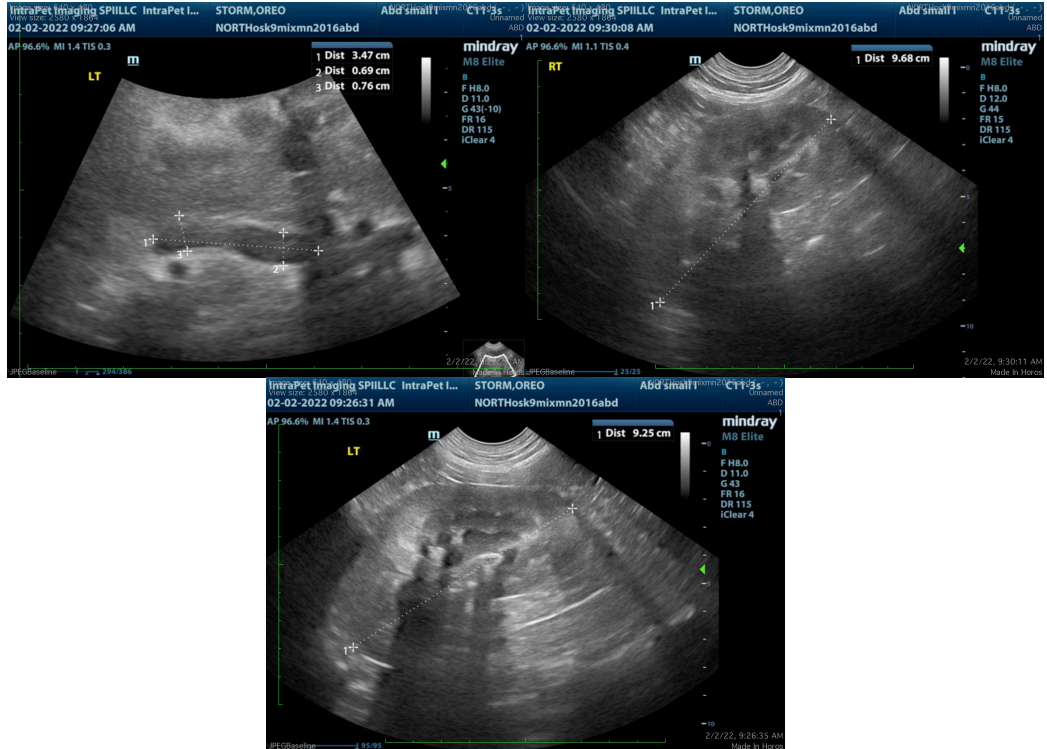
- Unremarkable abdomen except for the moderately gas distended stomach, which is consistent with the patient's reported presenting complaint of excessive panting.

## **INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

If this patient's pending low-dose Dexamethasone suppression test is positive for hyperadrenocorticism, this ultrasound supports pituitary dependent versus adrenal dependent hyperadrenocorticism. Having said that, another potential cause for this patient's excessive panting is hyperthyroidism if the T4 is truly increased. If this patient is on thyroid supplement, the dose should be lowered. If the patient is not on thyroid supplement, then differentials for the high T4 include autoantibodies or potentially thyroid neoplasia. Recommendations include a full thyroid panel including thyroid autoantibodies to the endocrinology lab at Michigan State.

Other recommendations in the meantime include a blood pressure in case hyperthyroidism has resulted in hypertension and the resultant panting. Other recommendations include thorough palpation of the patient's cervical region for a palpable thyroid nodule.





The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

Thank you for this referral. If the clinical or image interpretation does not parallel your findings or if I can be of any further assistance please contact me.

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