

**DATE PRESENTING CLINICAL SIGNS**

12/20/22 Vomits bile in the mornings. PU/PD.

**PATIENT** Current Medications: None.

Jinny Shock

Lab Results: ALT &amp; ALP very slightly elevated.

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

**SPECIES**

Canine

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN****BREED** *Urinary System*

Beagle

Urinary bladder is only mildly distended (empty). Visible contents are anechoic. Urinary bladder wall is unable to be fully assessed for pathology without further distension. No visible masses or cystoliths are observed. The trigone and visible pelvic urethra are normal thickness with a smooth mucosal surface. If there are urinary signs and/or concern for urinary bladder pathology, reassessment after complete filling is recommended.

**SEX**

Spayed Female

The right kidney is normal in size (5.82 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.

**AGE**

11/15/09

The left kidney is normal in size (5.2 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.

**WEIGHT**

36.5 Pounds

**Adrenal Glands****INTERPRETED BY**Beth Johnson, DVM  
DACVIM

The right adrenal gland is normal in size (2.13 cm long x 0.58 cm at the cranial pole and 0.54 cm at the caudal pole), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

**IMAGING PERFORMED BY**Stephanie Warga  
RDCS, RVT

The left adrenal gland is normal in size (2.1 cm long x 0.54 cm at the cranial pole and 0.61 cm at the caudal pole), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

**HOSPITAL NAME**

Parkville AH

**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.

**REFERRING VET**

Dr. Mangini

**Liver**

Liver is subjectively enlarged (swollen contour) without disruption of architecture. It has a normal homogenous echotexture. Parenchyma is diffusely hyperechoic characterized by less prominent than normal portal vein walls and increased echogenicity relative to the spleen and falciform fat. No focal lesions are observed. Visible vasculature and biliary tree appear normal without distension or congestion.

**INVOICE**

43589

Gallbladder is moderately distended with anechoic bile as well as mild suspended and gravity dependent echogenic debris. The wall is smooth without visible thickening. There is no evidence of cystic or CBD dilation. There is no evidence of effusion or inflammation.

### ***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 empty with no evidence of obstruction, foreign material or infiltrative disease. 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 free peritoneal effusion noted in these images.

There is no apparent lymphadenopathy noted in these images.

## **ULTRASONOGRAPHIC FINDINGS**

- **Hyperechoic hepatomegaly** - This appearance is non-specific and most consistent with a benign steroid (endocrine) or vacuolar hepatopathy or reactive or idiopathic hepatopathy. Inflammatory and/or infiltrative disease (such as round cell neoplasia) are also possible, but considered less likely.
- **Mild gallbladder debris** - Cholecystic debris is of unknown clinical significance. It can be seen with biliary stasis from fasting or illness. Cholecystic debris is not necessarily related to hepatobiliary disease. Echogenic bile is most commonly an incidental finding in dogs and should be interpreted in combination with clinical signs such as nausea, inappetence, cranial abdominal discomfort and/or laboratory changes such as increased ALP and/or increased Tbili.

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

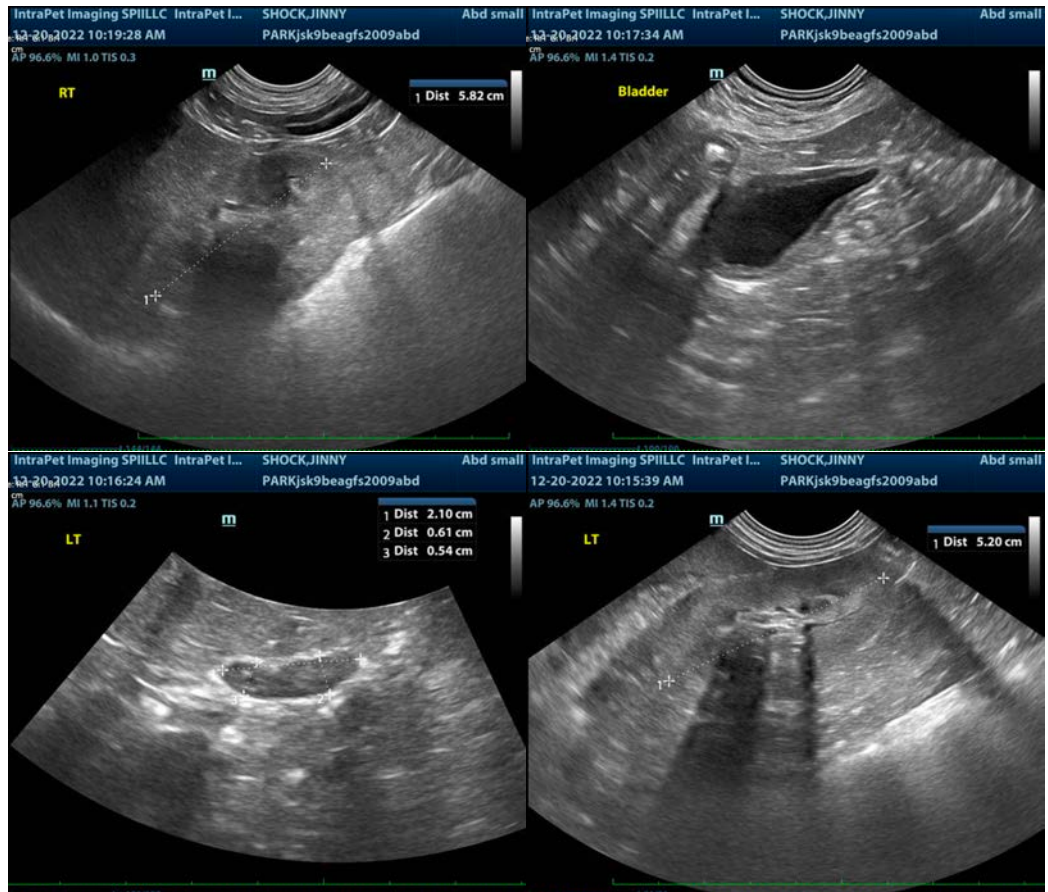
Given this patient's reported clinical signs and laboratory changes, hyperadrenocorticism may be a differential for this patient's PU/PD, as normal appearing adrenal glands does not rule out hyperadrenocorticism. Therefore, testing in the form of a low-dose Dexamethasone suppression test could be considered.

Having said that, however, hyperadrenocorticism does not typically result in vomiting, and it is not recommended to investigate hyperadrenocorticism in the face of concurrent illness due to the risk of false positives. Therefore, further investigation of the vomiting is recommended first, beginning with:

A gastrointestinal malabsorption panel (including cobalamin, folate, TLI and PLI) to Texas A&M GI Laboratory is recommended for further evaluation of GI and pancreatic function, followed by empirical deworming with a 5-day course of Panacur, as well as empirical medical management for potential GERD with twice daily antacid therapy and a small bedtime snack, potentially with a diet transition if well tolerated to a bland, easy to digest diet, or if that doesn't help, potentially a hydrolyzed protein diet, etc.

Ultimately, if vomiting and clinical signs persist, upper GI gastroscopy/endoscopy may be recommended for further evaluation and biopsies.





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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