

**DATE PRESENTING CLINICAL SIGNS**

8/10/23 Increased drinking and urination for about a month. About 1 pound weight loss.

**PATIENT** Current Medications: None listed.

Sam Placer

Lab Results: See attached.

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

**SPECIES**

Imaging Performed By: Rachel Brillhart, RDMS.

Feline

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**BREED**

**Urinary System**

DSH

The urinary bladder is moderately distended with anechoic urine. The Bladder wall, trigone, ureteral papillae and visible urethra (to a depth of 2cm) appear normal with no evidence of wall thickening, mucosal irregularities, masses or cystic calculi.

**SEX**

Neutered Male

The prostate is normal in size and shape for this neutered male dog. The parenchyma is homogenous and the external margins are smooth. The prostatic urethra appears normal with no evidence of irregularity, invasion, mass effect or calculi.

**AGE**

11/4/08

The left kidney has a normal shape and size (3.72 cm). Overall echogenicity is slightly hyperechoic with poor corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of focal perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

**WEIGHT**

9.6 Pounds

The right kidney has a normal shape and size (3.57 cm) with a previous infarct and a small cortical cyst visualized. Overall echogenicity is slightly hyperechoic with poor corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of focal perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

**INTERPRETED BY**

Kathleen Sennello DVM,  
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(Small Animal Internal  
Medicine)

**Adrenal Glands**

**HOSPITAL NAME**

Bay Country VH

The left adrenal gland is large in size measuring 0.94 cm at the caudal pole. It is observed in its normal position cranial to the left renal artery. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

**REFERRING VET**

Dr. Poff

The right adrenal gland is normal in size measuring 0.97 cm at the caudal pole. It is observed in its normal position between the cranial aspect of the right kidney and the caudal vena cava. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

**Spleen**

**INVOICE**

44576

The spleen is subjectively normal in size (0.70 cm), echotexture is homogenous, and the splenic capsule is smooth with no irregularities. The blood flow through the hilus and splenic parenchyma appears normal. No focal parenchymal abnormalities are visualized.

**Liver**

The liver is large with smooth peripheral margins. The parenchyma is hyperechoic and homogenous in echotexture. The visible portions of the vasculature and biliary tract appear normal. No focal nodules or cystic lesions are observed.

The gallbladder lumen is moderately distended. The wall of the gall bladder is not thickened and has a smooth mucosal surface. Luminal contents are mild and primarily anechoic. The cystic and common bile ducts are normal/not visible.

### ***Gastrointestinal***

The stomach contains minimal luminal contents. It measures at a normal thickness of <0.36cm with some variability due to the presence of rugal folds. The distinction of the gastric wall layers is adequate and there is no impression of reduced peristaltic activity. No masses or focal lesions were observed.

The visualized areas of duodenum, jejunum and ileum have a relatively uniform diameter with minimal fluid distension. Wall thickness is normal. Bowel loops follow a curvilinear path with distinct wall layering maintaining the typical 1:3 muscularis:mucosa layer ratio. The duodenum measured as normal (between 0.13-0.38cm in wall thickness) and the jejunum measured as normal (between 0.15-0.36cm.) Visualized peristalsis appears appropriate. There were no focal lesions consistent with obstruction or a mass effect observed.

The ileocecal junction was visualized and exhibited normal intact wall layering and is subjectively of normal thickness. Sections of colon are visualized with formed fecal material and gas shadowing distally. There is no observed focal or generalized colon wall thickening or loss of layering.

### ***Pancreas***

The pancreas is prominent, irregular and mottled compared to the surrounding isoechoic mesentery. There are numerous irregular ill-defined hypoechoic regions in the pancreas, most consistent with small hypoechoic nodules. There is no evidence of regional mesenteric inflammation or fluid.

### ***Free Abdomen***

Evaluation of the peritoneal cavity did not reveal any evidence of effusion, or subjective lymphadenomegaly. The Medial iliac nodes appear normal and there was no evidence of a caudal aortic thrombus at the bifurcation. The omentum is of normal uniform echogenicity.

## **ULTRASONOGRAPHIC FINDINGS**

- Decreased corticomedullary distinction in both kidneys with a small infarct and cyst visualized in the right kidney – Mild loss of corticomedullary distinction in both kidneys could be consistent with chronic degenerative disease or interstitial nephrosis.
- Bilateral adrenomegaly – The bilateral adrenomegaly could be consistent with bilateral hyperplasia (e.g., secondary to pituitary-dependent hyperadrenocorticism), bilateral infiltrative neoplasia, inflammatory adrenal disease, other. Correlation with clinical findings is recommended.
- Large, irregular/mottled nodular pancreas – Findings are most consistent with nodular hyperplasia. These changes could be consistent with mild active inflammation or previous episodes of pancreatic inflammation.
- Large, hyperechoic liver – Hepatic changes are non-specific and could be consistent with hepatic lipidosis, inflammatory/infectious disease, infiltrative neoplasia, or other hepatopathy.

## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

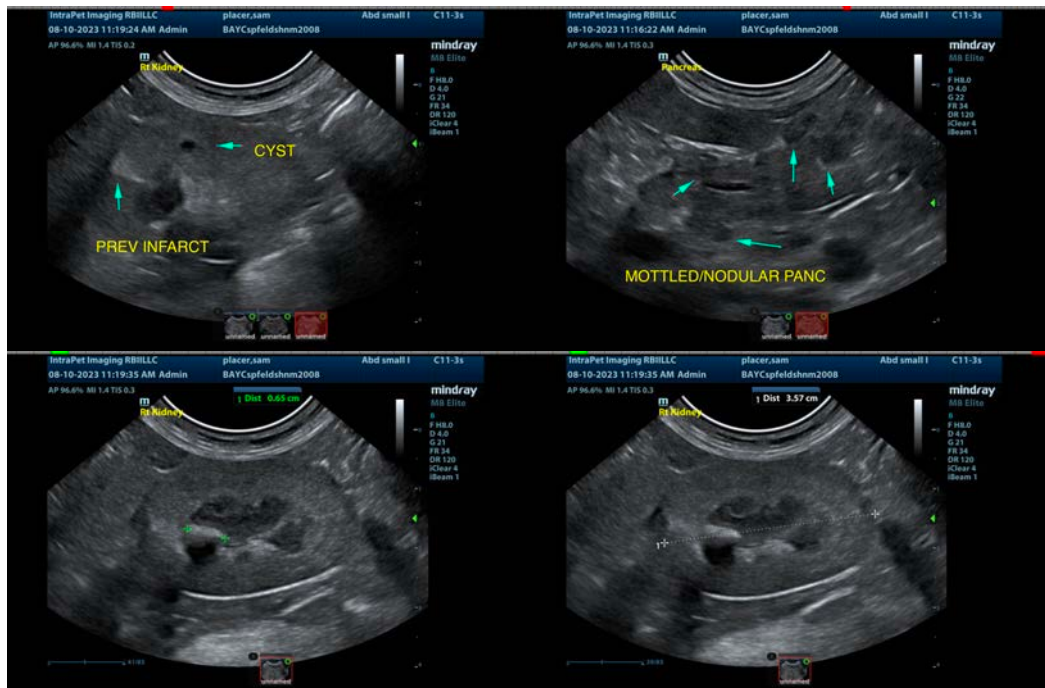
There are many likely reasons for this patient being PU/PD. I'm concerned this could be a transient diabetic. Consider Fructosamine levels to see if the moderate elevation in glucose is chronic. Additionally, there is evidence for early renal disease, and both adrenals are large and hypoechoic, which could be consistent with Cushing's disease or other adrenal pathology.

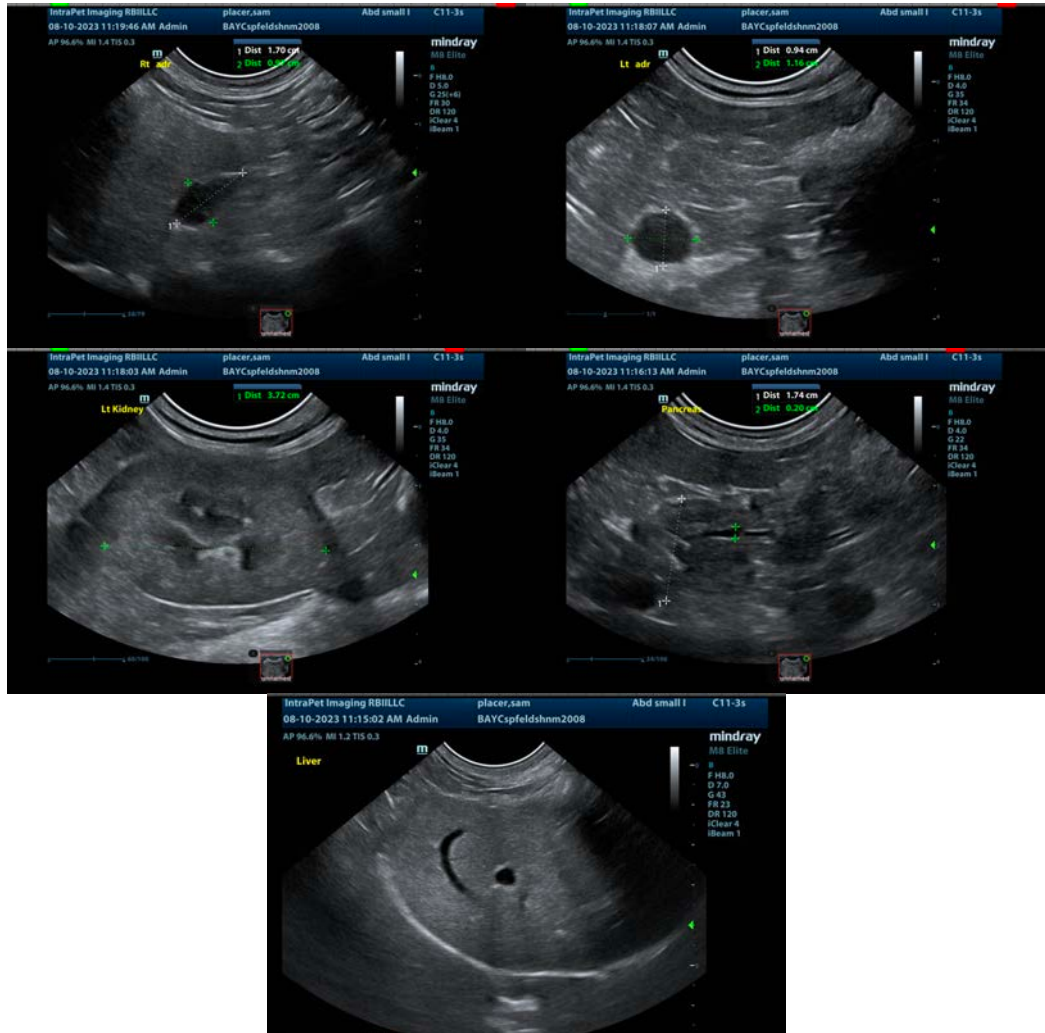
The elevation in ALT is somewhat unexpected. Consider a liver function test and a fine needle aspirate of the liver, provided coagulation panels are normal. Additionally, screening for toxoplasmosis could be considered.

Additionally, the pancreas is prominent, nodular and mottled. This could be consistent with active pancreatic inflammation or previous episodes of pancreatic inflammation. Correlate these findings with a quantitative fPLI level.

Given the renal and adrenal changes observed, recommend a blood pressure evaluation. If clinical symptoms consistent with Cushing's are present (thin skin, diabetes, etc.), you could consider adrenal function testing in this individual.

Recommend three view thoracic radiographs to evaluate for possible concurrent thoracic disease/involvement.





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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