

**DATE PRESENTING CLINICAL SIGNS**

6/20/23 Chronic transient GI signs, suspicion of IBD. Controlled hyperthyroid disease.

**PATIENT** Current Medications: Methimazole transdermal 2.5mg BID.

Lab Results: See attached.

Harry Plunkett Date of Previous IntraPet Ultrasound: No previous.

Sedation: IM: butorphanol 10mg/ml 0.05cc, dexdomitor 0.5mg/ml 0.05cc.

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 mild primarily suspended echogenic debris present. 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 calculi. Echogenic debris of this type can be associated with small crystals, cellular debris and proteinaceous debris.

**SEX**

Neutered Male

The left kidney is normal in size (3.47 cm) but irregular in shape (likely due to previous infarcts). Additionally, there are small non-obstructive mineralizations noted, one of which measures 0.28 cm. Overall echogenicity is slightly hyperechoic with significantly decreased 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 or hydroureter. Renal vasculature is normal.

**AGE**

5/3/15

**WEIGHT**

10.2 Pounds

The right kidney is normal in size (3.16 cm) but irregular in shape (likely due to previous infarcts) with small non-obstructive mineralizations, one of which measures 0.27 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 or hydroureter. Renal vasculature is normal.

**INTERPRETED BY**

Kathleen Sennello DVM,  
MS, Diplomate ACVIM  
(Small Animal Internal  
Medicine)

**Adrenal Glands**

The region of left adrenal (Cranial to left renal artery) is unremarkable but the adrenal is not distinctly visualized. No evidence of a mass effect is visualized.

**HOSPITAL NAME**

Festival Vet Clinic

The region of the right adrenal (between right cranial kidney and vena cava) is unremarkable, but the adrenal is not distinctly visualized. No evidence of a mass effect is visualized.

**REFERRING VET**

Dr. Beron

**Spleen**

The spleen is subjectively normal in size (0.80 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.

**INVOICE**

43298

**Liver**

The liver is subjectively normal in size, and echogenicity with smooth peripheral margins. The parenchyma is homogenous 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. Jejunum wall measures 0.22 cm. 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 and mottled compared to the surrounding isoechoic mesentery. There is no evidence of nodules or cystic lesions. There is no evidence of regional mesenteric inflammation or fluid.

### ***Free Abdomen***

Evaluation of the peritoneal cavity did not reveal any evidence of effusion. There is no significant lymphadenopathy. A mesenteric lymph node is visualized measuring 0.29 cm. 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**

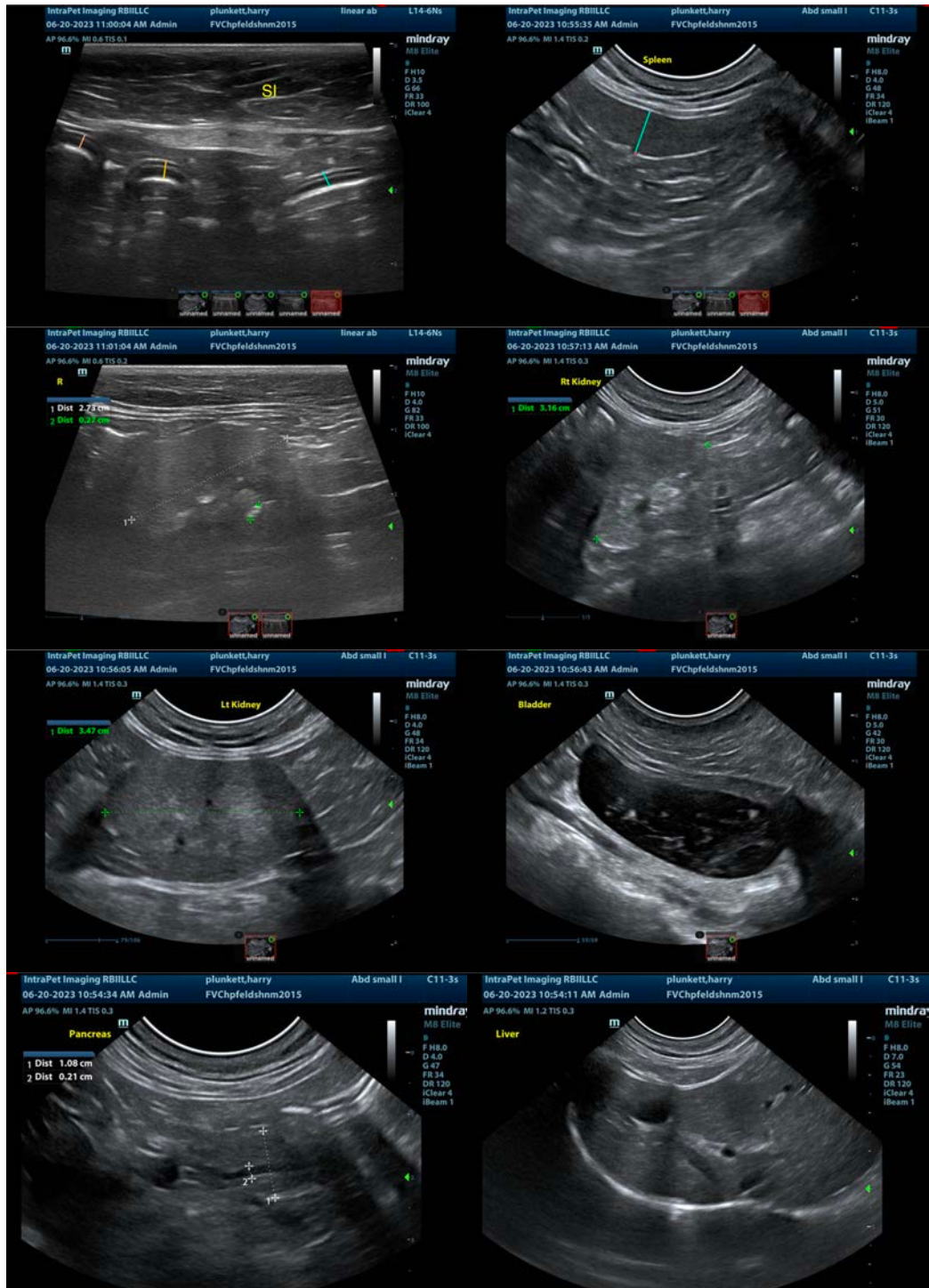
- Echogenic debris in the urinary bladder – The echogenic debris in the bladder lumen could be consistent with cells, crystals, and/or mucus.
- Irregular kidneys with previous areas of infarction and significantly decreased corticomedullary distinction with small non-obstructive mineralizations – Mild loss of corticomedullary distinction in both kidneys could be consistent with chronic degenerative disease or interstitial nephrosis. The renal lesions identified are ill defined and hyperechoic, these could be consistent with previous renal infarcts and can be an indicator of current or previous renal disease.
- Prominent, mottled pancreas – The pancreatic changes are most consistent with mild pancreatitis or a recent episode of pancreatic inflammation.

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

No focal lesions are visualized associated with the gastrointestinal tract to explain the GI signs reported. Unfortunately, you can still have gastrointestinal disease with relatively normal ultrasound. Additionally, the pancreas is prominent and mottled. Correlate these findings with a quantitative fPLI level. If elevated, consider treatment for pancreatitis. Additionally, you could consider the following:

- Consider a novel protein/hydrolyzed protein diet (exclusively at least 4-6 weeks).
- Consider a GI panel to Texas A&M for evaluation of B12 levels, folate, PLI/TLI etc.. to further evaluate for pancreatic/small intestinal disease.
- Consider chronic probiotic therapy.
- If symptoms are progressing despite taking these measures and a primary enteropathy is strongly suspected, consider obtaining GI biopsies.

There are significant changes visualized associated with both kidneys. These are most consistent with chronic progressive renal disease. Recommend blood pressure evaluation, urinalysis and culture as a baseline. This would also serve to evaluate the echogenic debris visualized in the urinary bladder.



**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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