

**DATE PRESENTING CLINICAL SIGNS**

10/11/22 Vomiting. History of constipation at Animal Emergency Hospital for straining to urinate.

PATIENT Current Medications: Fluoxetine 5mg SID, Cerenia 8md SID

Romeo Gilwee

Hills Z/D cans, Lactulose 1.5cc BID, Miralax 1/8 tsp BID

Lab Results: fPL normal 10/6/22. Urine SG 1.035. Chem: Glu elevated likely stress. CBC NSF

Date of Previous IntraPet Ultrasound: No previous.

SPECIES

Feline

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**BREED**

DSH

Urinary System

The urinary bladder is moderately distended with anechoic urine. The Bladder wall appears diffusely thick and irregular, measuring at 0.24 cm. Additionally, there are some rare pinpoint shadowing foci, most consistent with small calculi (possibly embedded?), measuring approximately 0.21 cm and 0.12 cm. The area of the trigone, ureteral papillae, and proximal urethra appear free of any mass lesions.

SEX

Neutered Male

The left kidney has a normal shape and size (4.3 cm). Overall echogenicity is normal with adequate 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.

AGE

5/11/10

WEIGHT

13.03 Pounds

The right kidney has a normal shape and size (4.23 cm). Overall echogenicity is normal with adequate 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,
MS, Diplomate ACVIM
(Small Animal Internal
Medicine)

Adrenal Glands

The left adrenal gland is normal in size measuring 0.50 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.

IMAGING PERFORMED BY

Rachel Brilhart RDMS

The right adrenal gland is normal in size measuring 0.40 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.

HOSPITAL NAME

Jacksonville VH

Spleen

The spleen is subjectively normal in size (0.77 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.

REFERRING VET

Dr. Burk

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.

INVOICE

41967

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 uniform diameter with minimal fluid distension. Wall thickness is normal to slightly increased. Bowel loops follow a typical curvilinear path with distinct wall layering, but some areas display a prominent muscularis layer which does not display the typical 1:3 muscularis:mucosa layer ratio. Jejunum wall measures 0.28 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 normal and isoechoic to surrounding 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, 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

- Thickened, irregular bladder wall with occasional hyperechoic foci – Findings are most consistent with cystitis (bacterial or sterile) and small mineralizations, which could be embedded or adhered to the mucosa.
- Prominent muscularis layer of the small intestine – The small intestinal wall changes could be consistent with an underlying inflammatory process. These types of changes can sometimes be seen in normal older cats. Correlate with clinical signs.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

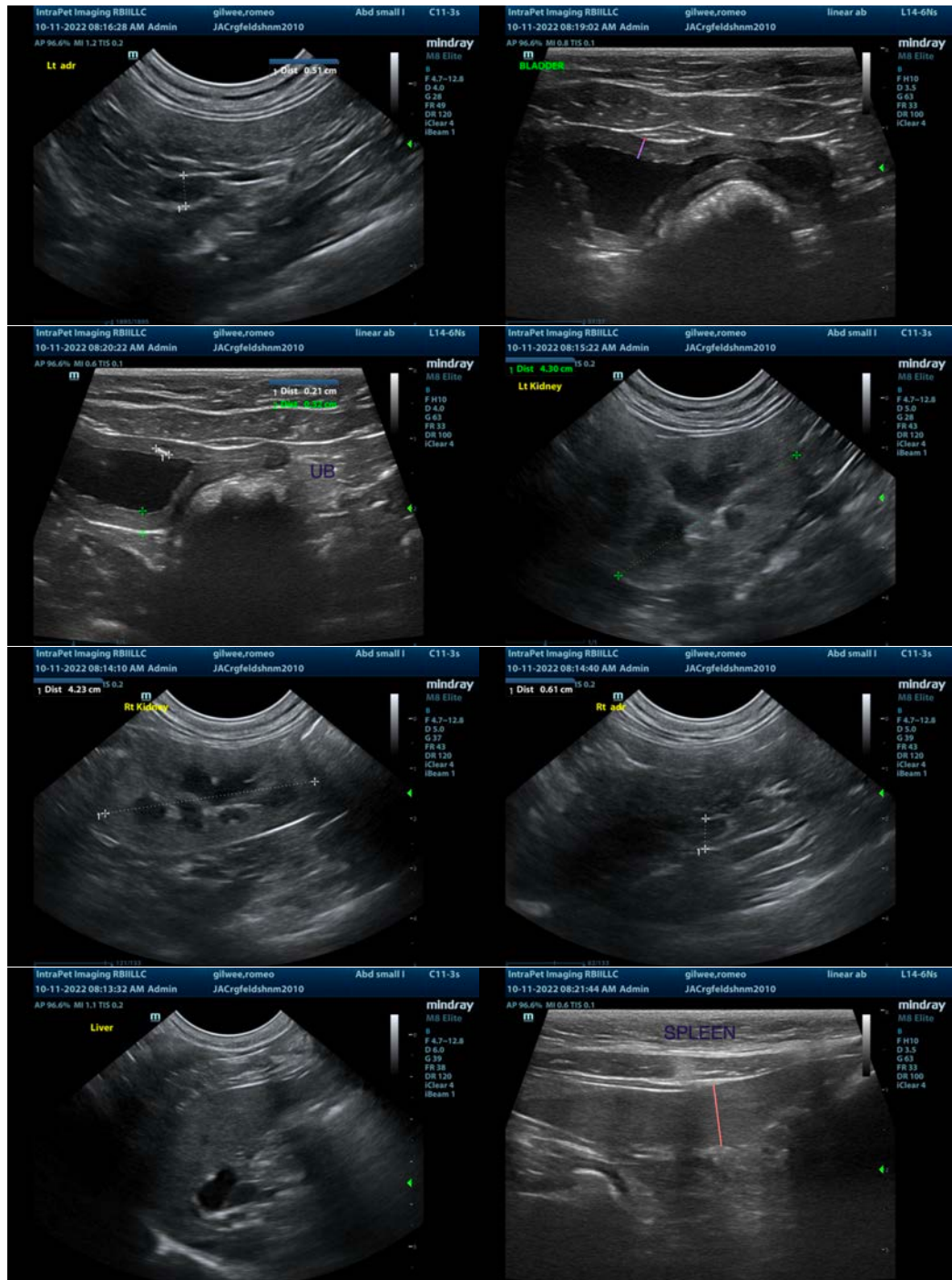
An obvious source for the vomiting reported is not observed. There is a slightly prominent muscularis layer to the small intestine. This can be normal for some cats but can also be an indicator of small intestinal disease. Initially, I would consider:

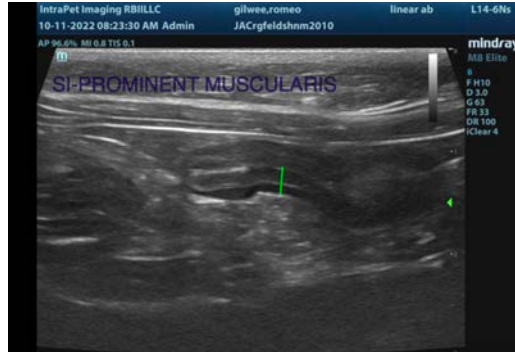
- Novel protein/hydrolyzed protein prescription diet.
- Consider a GI panel to Texas A&M for evaluation of B12 levels, folate, PLI/TLI etc.. to further evaluate for pancreatic/small intestinal disease.
- If symptoms persist or worsen, consider obtaining GI biopsies.

The urinary bladder wall appears thickened and somewhat irregular with hyperechoic foci, representing small calculi/sandy debris, which is either embedded or adhered to the urinary bladder wall.

- Recommend urinalysis and culture.

- If there is an infection present, recommend treatment based on culture and sensitivity results. If there is no evidence of infection on culture, then consider possible sterile cystitis and possible treatment for this syndrome (behavioral modification, dietary modification for possible small stones, etc.). Continued monitoring for any signs of obstruction is warranted. No mineralizations were visualized within the proximal urethra.





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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