

**DATE PRESENTING CLINICAL SIGNS**

8/15/23

Will come to eat, ask for food, and doesn't eat--last few days more pronounced but ongoing for longer than that; eating rx urinary and weight control food--Blue Buffalo W and U and Hill's c/d wt control. Also will eat RC SO dry only. Hx bladder stone found in 11/22--trying to treat w/ diet. recheck xray in 12/22 showed stone still present. no V--no urinary symptoms seen. no D. energy level wnl, active and playful. Guessing she eats about 1/3 of her normal currently--o feels she's lost wt

PATIENT

Chloe Cook

SPECIES

Feline

Date of Previous IntraPet Ultrasound: No previous.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.
Imaging Performed By: Rachel Brillhart, RDMS.

BREED

DSH

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**SEX**

Spayed Female

Urinary System

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, or masses. There is a hyperechoic focal shadowing structure in the dependent portion of the urinary bladder measuring 0.74 cm, most consistent with a calculus.

AGE

6/20/09

The left kidney has a normal shape and size (4.28 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

8.8 Pounds

The right kidney has a normal shape and size (3.44 cm) with mild pyelectasia at 0.22 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 nephroliths, infarcts or hydroureter. Renal vasculature is normal.

INTERPRETED BY

Kathleen Sennello DVM,
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(Small Animal Internal
Medicine)

Adrenal Glands

The left adrenal gland is normal in size measuring 0.52 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.

HOSPITAL NAME

Homeward Bound VS

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. Vance

Spleen

The spleen is subjectively normal in size (0.90 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

44663

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 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. Duodenum wall measures 0.36 cm. Jejunum wall measures 0.25 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 hyperechoic, prominent and mottled. 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 are occasional prominent mesenteric lymph node. One such lymph near the ileocecal junction measures 0.64 cm in diameter. The omentum is generally of normal echogenicity.

ULTRASONOGRAPHIC FINDINGS

- Focal shadowing hyperechoic structure in the dependent portion of the urinary bladder – Findings are most consistent with a bladder stone.
- Decreased corticomedullary distinction in both kidneys with mild pyelectasia of the right kidney – Mild loss of corticomedullary distinction in both kidneys could be consistent with chronic degenerative disease or interstitial nephrosis. Pyelectasia of the kidney(s) could be consistent with pyelonephritis, chronic renal disease, secondary to PU/PD or fluid therapy (if applicable), other.
- Prominent, mottled, hyperechoic pancreas – The pancreatic changes are most consistent with mild pancreatitis or a recent episode of pancreatic inflammation.
- Diffusely prominent/thickened small intestine with a prominent muscularis layer – 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.
- Prominent/mildly enlarged mesenteric lymph nodes – The prominent abdominal lymph nodes are most consistent with reactive lymphadenitis or lymphoid hyperplasia. Neoplastic infiltration is considered less likely.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

There is the general appearance of somewhat prominent/“ropey” small intestine with prominent muscularis layer as well as occasional prominent hypoechoic mesenteric lymph nodes. This could be consistent with a primary enteropathy, although some normal older cats can have a prominent muscularis layer. Consider the following:

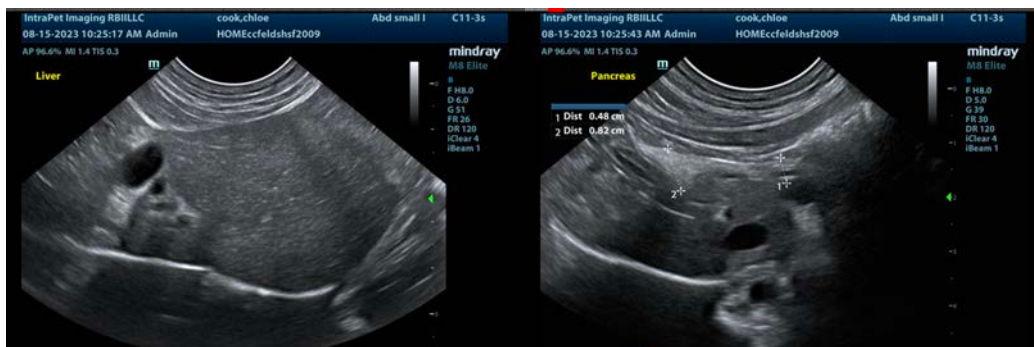
- Consider a novel protein/hydrolyzed protein diet (exclusively at least 4-6 weeks)
- Consider a GI panel to Texas A&M for evaluation of B12 levels, folate, PLI/TLI etc.. to further evaluate for pancreatic/small intestinal disease.
- Recommend chronic probiotic therapy.

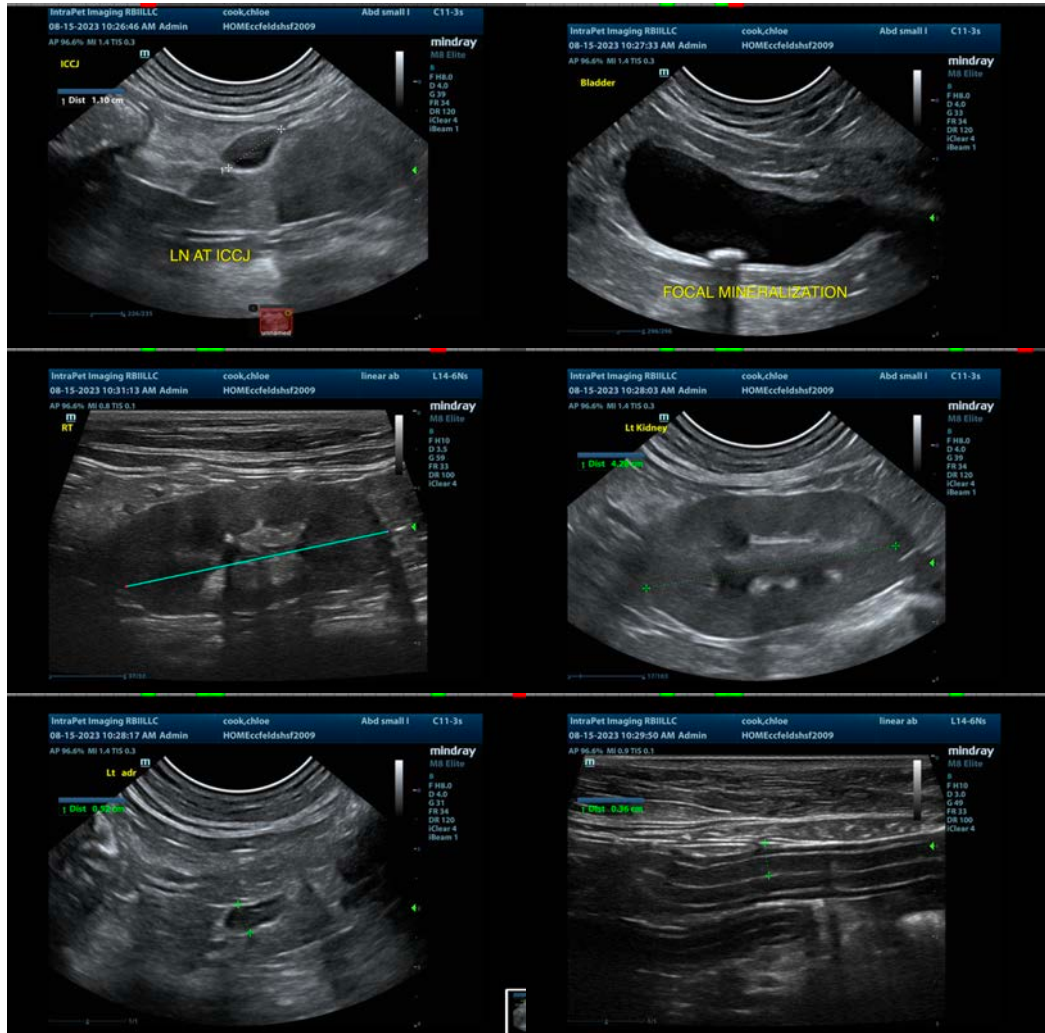
If routine lab work is normal, making metabolic disease much less likely, and there are abnormalities on the GI panel consistent with a primary enteropathy, then this would be my primary concern. If there is minimal response to the symptomatic therapy above, then consider obtaining GI biopsies. Additionally, the pancreas is somewhat prominent. If a quantitative PLI level is elevated, then consider symptomatic therapy for chronic pancreatitis.

There are prominent mesenteric lymph nodes, although they are somewhat sporadic. Fine needle aspirate could be considered if a good window is obtained.

There is decreased corticomedullary distinction in both kidneys and mild pyelectasia in the left kidney. These changes are consistent with age related chronic renal disease. Recommend urinalysis, culture and blood pressure as a baseline. Additionally, there is a stone visualized in the urinary bladder, which has been historically followed with radiographs. Recommend continued monitoring.

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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