

DATE PRESENTING CLINICAL SIGNS

12/3/21 History: Chronic vomiting.

PATIENT Date of Previous IntraPet Ultrasound: No previous IntraPet scans.
Homer Allen Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.

SPECIES ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Feline Urinary System

BREED The urinary bladder is mild/moderately distended with anechoic urine. The urinary bladder wall is of normal thickness, but there is mild mucosal irregularity noted. The area of the trigone, ureteral papillae and visible urethra (to a depth of 2cm) appear normal with no evidence of mucosal irregularities, masses or cystic calculi. Findings are most consistent with cystitis or lack of urine distention.

DSH

SEX

Neutered Male The left kidney has a normal shape and size (3.93 cm) with pyelectasia (0.59 cm). Overall echogenicity is slightly hyperechoic with poor corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. There is no evidence of nephroliths, infarcts or hydronephrosis. Renal vasculature is normal.

AGE

The right kidney has a normal shape and size (3.91 cm) with pyelectasia (0.44 cm). Overall echogenicity is slightly hyperechoic with poor corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. There is no evidence of nephroliths, infarcts or hydronephrosis. Renal vasculature is normal.

WEIGHT

9.9 Pounds

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.

INTERPRETED BY

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

The right adrenal gland is normal in size measuring 0.39 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.

IMAGING PERFORMED BY

Rachel Brillhart RDMS

Spleen

The spleen is subjectively normal in size. The spleen echotexture is heterogenous and mottled, the splenic capsule is smooth with no irregularities. The blood flow through the hilus and splenic parenchyma appears normal. There are occasional discreet hyperechoic nodules visualized, the largest measuring 0.38 cm.

HOSPITAL NAME

Homeward Bound VS

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.

REFERRING VET

Dr. Vance

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

INVOICE

33235

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 curvilinear path largely with distinct wall layering, but in some areas the wall is more hypoechoic with a loss of some detail. Other areas display a prominent muscularis layer which does not display the typical 1:3 muscularis:mucosa layer ratio. Jejunum wall measured 0.23 cm. Duodenum wall measured 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 prominent and hypoechoic as 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. Dilated pancreatic duct noted at 0.36 cm.

Free Abdomen

Evaluation of the peritoneal cavity did not reveal any evidence of effusion. Occasional prominent mesenteric lymph nodes are visualized with a lymph node measured at 0.59 cm. The omentum is generally of normal uniform echogenicity.

PRIMARY FINDINGS

- Decreased corticomedullary distinction in both kidneys with bilateral pyelectasia – Mild loss of corticomedullary distinction in both kidneys could be consistent with chronic degenerative disease or interstitial nephrosis. Pyelectasia of the left/right kidney could be consistent with pyelonephritis, chronic renal disease, secondary to PU/PD or fluid therapy (if applicable), other.
- Prominent muscularis layer in most sections of small intestine, occasional areas with decreased detail in wall layering. The bowel wall changes could be consistent with inflammation edema or infiltrative neoplasia.
- Hypoechoic, prominent pancreas with prominent pancreatic duct – The pancreatic changes are most consistent with mild pancreatitis/pancreatic inflammation. Recommend fPLI testing and continued monitoring for improvement or possible development of a pancreatic abscess. Consider fine needle aspirate if not improving.
- Mottled spleen with occasional hyperechoic nodules – The diffuse splenic changes are non-specific and could be consistent with lymphoid hyperplasia, extramedullary hematopoiesis, infiltrative neoplasia, inflammation, other. Cytology or histopathology would be necessary to get a definitive diagnosis. While hyperechoic nodules tend to be more benign in nature, an underlying neoplastic process cannot be ruled out.

SECONDARY FINDINGS

- Mild mucosal irregularity of the urinary bladder – The bladder mucosal changes could be consistent with cystitis or artifactual due to lack of adequate luminal distension. Bladder neoplasia cannot be ruled out but is considered unlikely in this patient. Recommend urinalysis and culture.

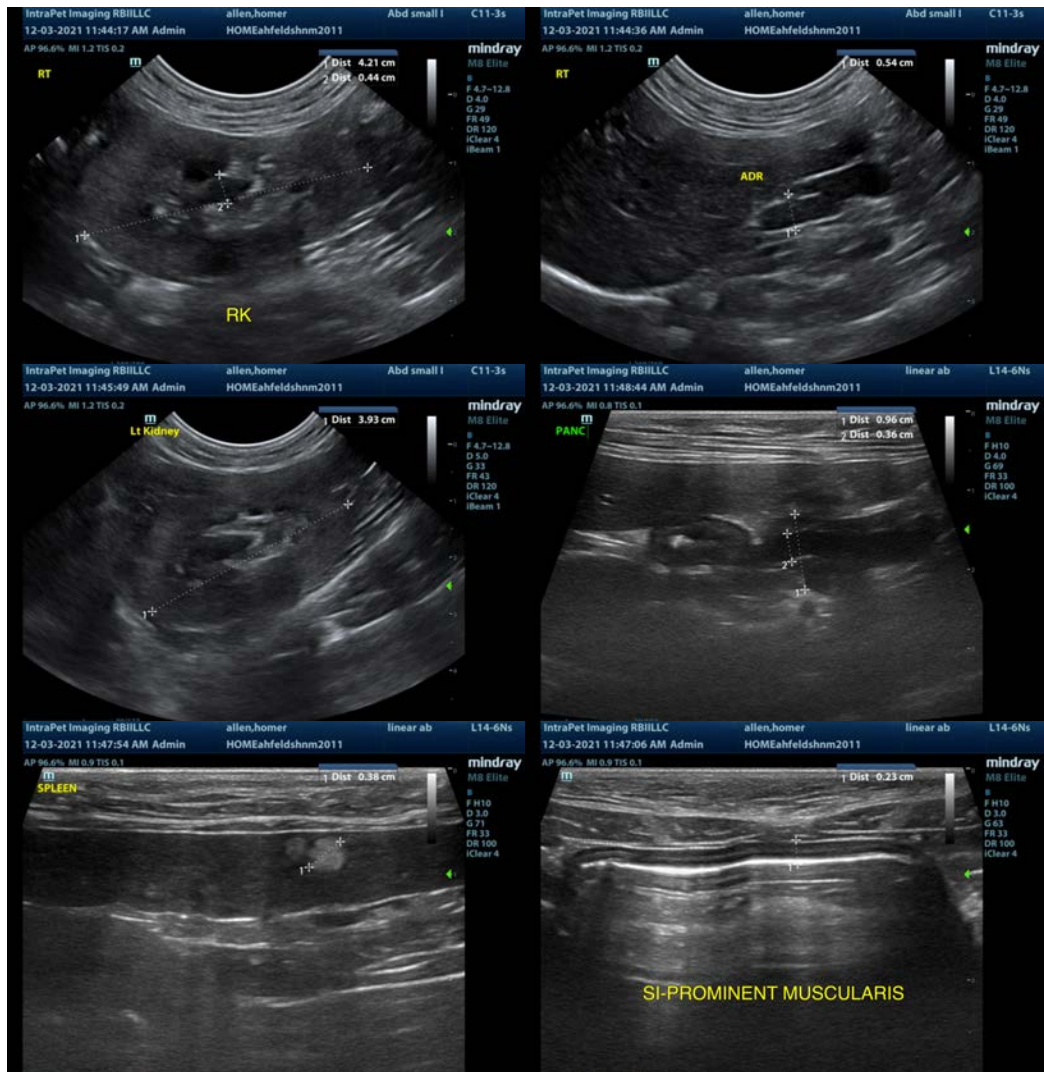
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

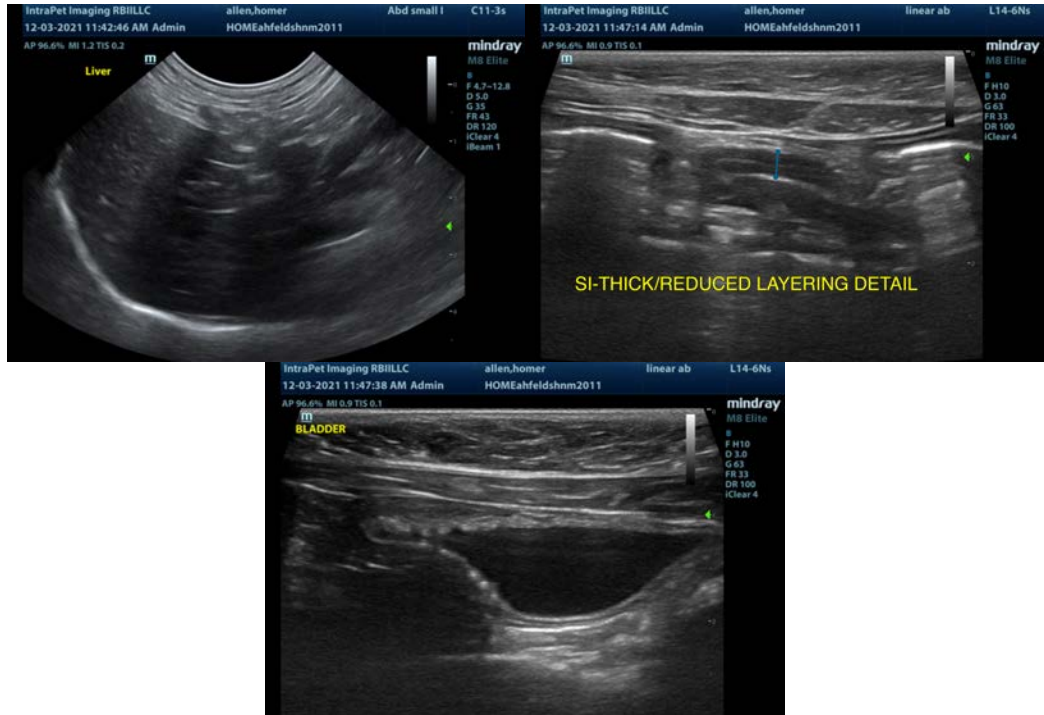
The ultrasound changes to the kidneys were somewhat non-specific. No obstructive process was noted. Recommend urinalysis and culture to look for evidence of active pyelonephritis. Recommend blood pressure

evaluation and bloodwork to determine if there are any renal value elevations.

The bowel appears subjectively thickened with some areas having a prominent muscularis layer, and some areas having reduced detail. These changes are non-specific, but with more chronic symptoms, I would most strongly consider food allergy, IBD, and intestinal neoplasia as differentials.

- Recommend diet trial with novel protein/hydrolyzed protein prescription diet.
- Recommend a GI panel to Texas A&M to evaluate a quantitative fPLI, TLI, cobalamin and folate to further evaluate for pancreatic and small intestinal disease
- Recommend probiotic therapy.
- If symptoms are progressing, recommend obtaining GI biopsies.





The information and recommendations provided are based on the images presented by the referring veterinarian. 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.

Kathleen Sennello DVM,MS, Diplomate ACVIM (Small animal Internal Medicine)
kathleen.sennello@sonopath.com