

**DATE PRESENTING CLINICAL SIGNS**

1/4/23

Presented for linear area of thinning haircoat from lumbar region to the tail. Negative for mites, fleas, dermatophytosis. On Bravecto and hypoallergenic/hydrolyzed protein diet. Prior to steroids in an older cat with no previous signs of allergic disease, performed radiographs and the following findings were noted (see below): No obvious murmur, proBNP level 29 (0-100)

PATIENT

JJ Wells

SPECIES

Feline

BREED

DSH

SEX

Neutered Male

AGE

8/15/11

WEIGHT

15.6 Pounds

INTERPRETED BY

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

HOSPITAL NAME

Frederick Road VH

REFERRING VET

Dr. Beyer

INVOICE

43920

Current Medications: Bravecto, z/d diet
Lab Results: full senior panel wnl, proBNP 29 (0-100)
Radiographs: Please see attached Synergy Report.
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.

Imaging Performed By: Stephanie Warga RDCS, RVT

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**Urinary System**

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.

The left kidney has a normal shape and size (4.31 cm) with pinpoint non-obstructive nephroliths. 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, infarcts or hydronephrosis. Renal vasculature is normal.

The right kidney has a normal shape and size (4.58 cm) with pinpoint non-obstructive nephroliths. 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, infarcts or hydronephrosis. Renal vasculature is normal.

Adrenal Glands

The left adrenal gland is normal in size measuring 0.37 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. Subtle hyperechoic foci are visualized within the adrenal.

The right adrenal gland is normal in size measuring 0.35 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. Subtle hyperechoic foci are visualized within the adrenal.

Spleen

The spleen is subjectively normal in size (0.63 cm in width at the level of the hilus), 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 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 0.24 cm. Jejunum wall measures 0.19 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. There is no significant lymphadenopathy noted, but there is a subtle iso- to hypoechoic small, rounded structure measuring 0.44 cm x 0.39 cm visualized in the left cranial abdomen medial to the spleen. The omentum is of normal 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.
- Subtle hyperechoic foci in both adrenal glands – Findings are most consistent with age related mineralization.
- Small pinpoint nephroliths in both kidneys – The hyperechoic mineralized foci observed at the corticomedullary junction of the left/right kidney are consistent with small, non-obstructive nephroliths.
- Mildly 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.
- Small iso- to hypoechoic structure visualized medial to the spleen – This structure is very subtle and could represent an early bates body, a lymph node, etc.

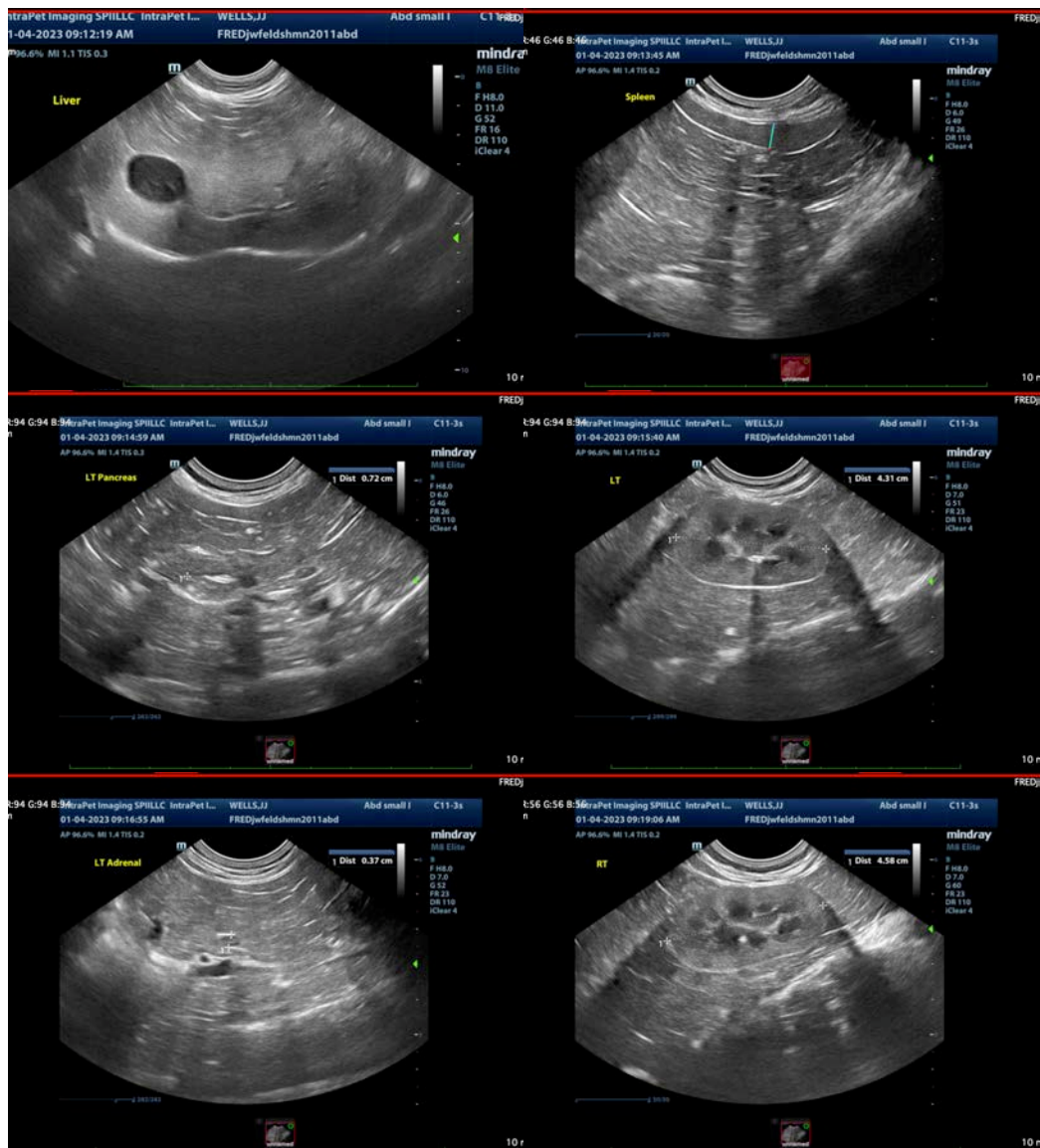
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

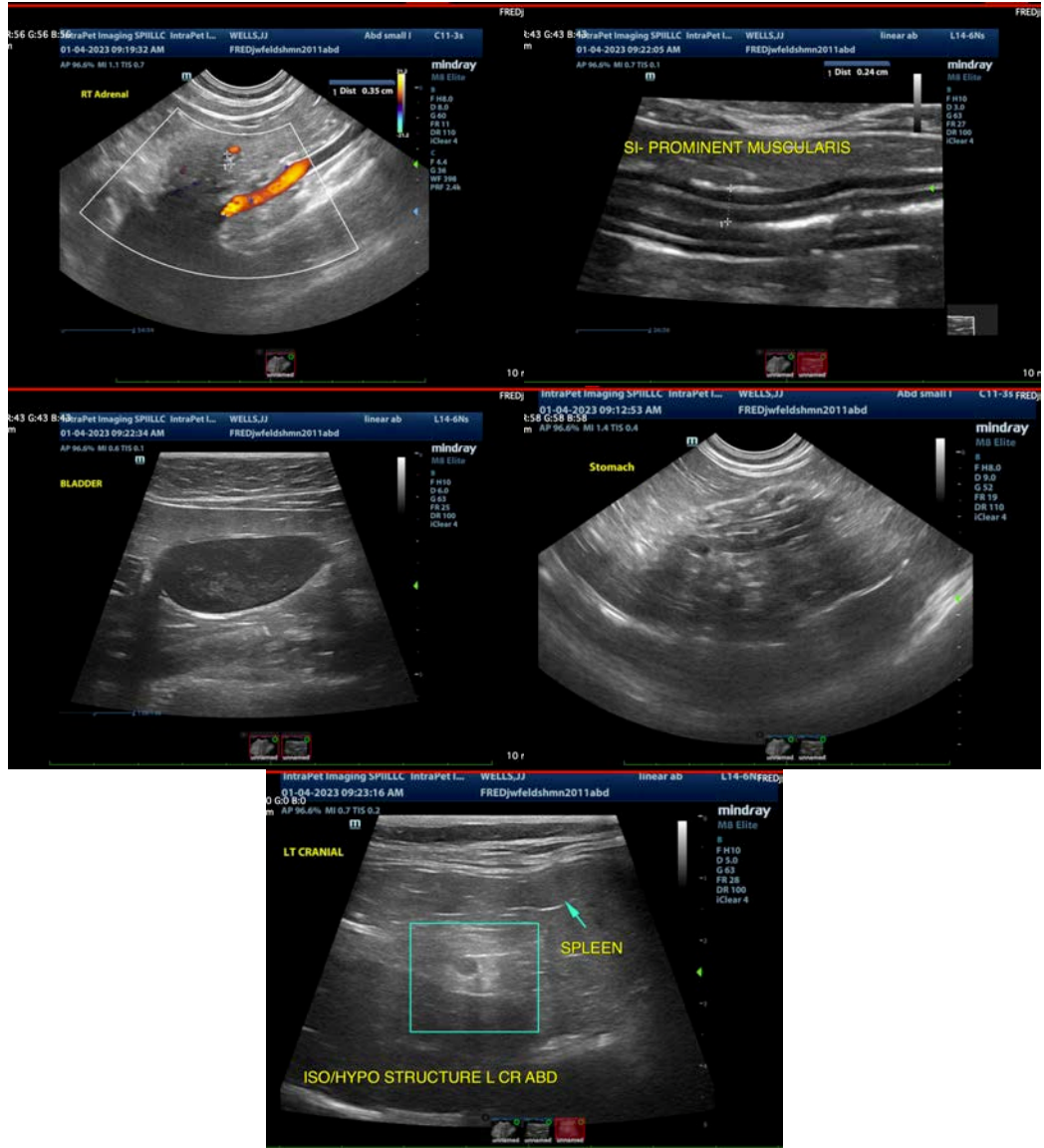
The findings on today's exam are relatively mild and largely age related. There is some echogenic debris visualized in the urinary bladder. Recommend a urinalysis and culture. Additionally, there are hyperechoic foci visualized associated with the adrenals and both kidneys. There is no evidence of an obstructive process.

Continued monitoring is warranted.

The muscularis layer of the small intestine is somewhat prominent, but there is no obvious thickening. In the absence of GI signs, I suspect this is age related. If there is concern for underlying GI disease, consider a GI panel to Texas A&M for a qualitative fPLI, TLI, cobalamin and folate.

There is a small, very subtle iso- to hypoechoic structure visualized in the left cranial abdomen. This is possibly what is being described on radiographs. This does not appear to be associated with the visible left limb of the pancreas. It seems most consistent with a fatty type structure, but continued monitoring is warranted or a fine needle aspirate could be considered.





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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