

**DATE PRESENTING CLINICAL SIGNS**

1/31/23

1/26/23 lethargic and not eating much for 2 days. Vomited some white foam Tuesday night but not since. Ate a sm amount of food Thursday morning. She had lost 2.5 pounds since she had last been seen in 2020. Aside from the weight loss and some dental calculus, her PE was unremarkable and she was not running a fever. An x-ray did not reveal anything except some aerophagia (she has chronic UR issues). Bloodwork showed a total protein of 9.9 with globulins of 7.1g/dL and an a/g ratio of 0.4. She was treated for a possible pancreatitis episode (prior to the bloodwork results) and sent home. She ate a little that night but was still lethargic so brought in for fluids the next day. She had a low grade fever of 103.1. There is a suspicion for FIP but she is middle-aged so there is the potential the weight loss, hyperglobulinemia and fever could be due to something else.

PATIENT

Bonnie Thomas

SPECIES

Feline

BREED

DSH

SEX

Spayed Female

AGE

5/1/15

WEIGHT

6.5 Pounds

INTERPRETED BY

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(Small Animal Internal
Medicine)

HOSPITAL NAME

Cat Sense Feline
Hospital

REFERRING VET

Dr. Sinclair

INVOICE

44629

Current Medications: Cerenia 4mg SID, SQ fluids. GS medication for FIP.
Lab Results: TP=9.9g/dL, glob=7.1g/dL, a/g=0.4
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 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, masses or cystic calculi.

The left kidney has a normal shape and size (3.53 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.

The right kidney has a normal shape and size (3.23 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.

Adrenal Glands

The left adrenal gland is normal in size measuring 0.38 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.

The right adrenal gland is normal in size measuring 0.48 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.

Spleen

The spleen is subjectively normal in size (0.82 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 mildly heterogeneous in echotexture with subtle, indistinct focal mottling. 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 0.18 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 left limb of 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.

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

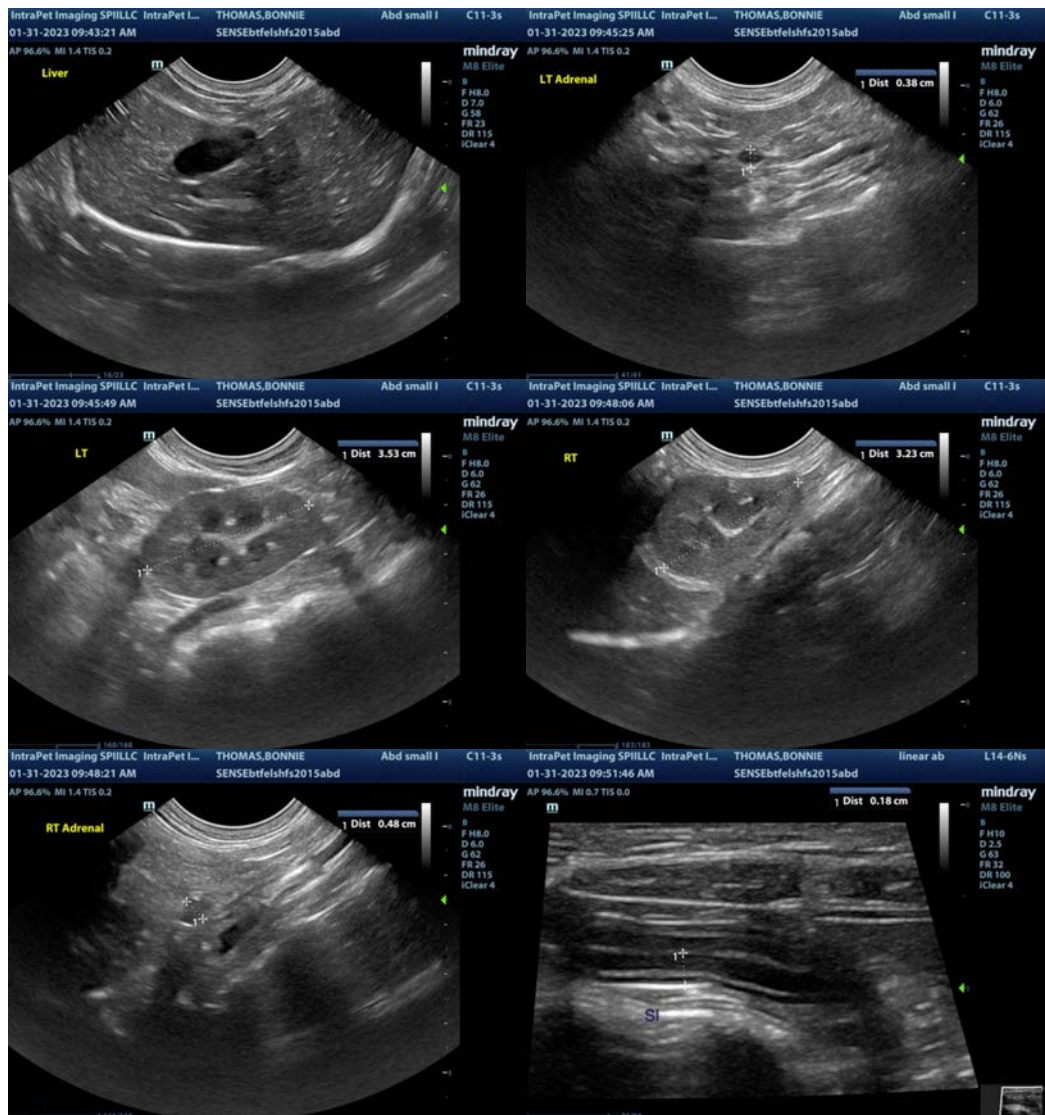
- Prominent, hypoechoic left limb of the pancreas – The pancreatic changes are most consistent with age-related parenchymal remodeling, potentially secondary to a prior inflammatory episode, early fibrosis or chronic pancreatitis.
- Mildly heterogeneous liver – Hepatic changes are non-specific and could be consistent with inflammation/infection (cholangiohepatitis), infiltrative neoplasia, lipidosis or other hepatopathy. The significance of this is unclear if liver enzymes are normal. This could be incidental.

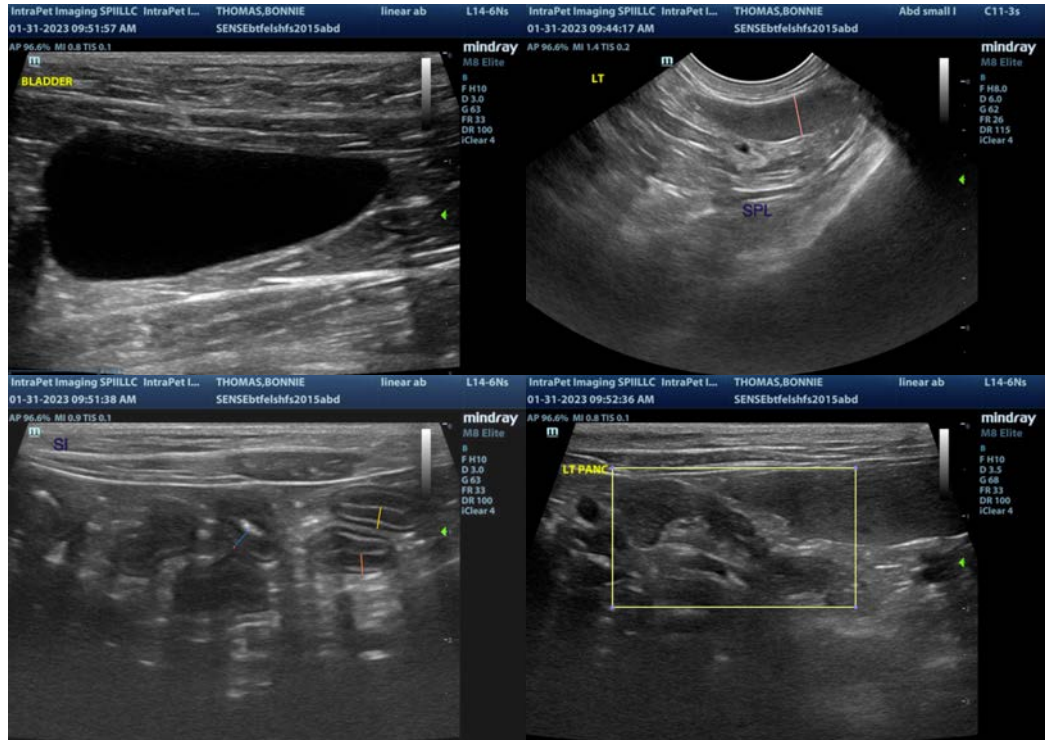
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Today's scan appears relatively normal. There are no significant mass effects, bowel thickening, lymphadenopathy, etc. to support an FIP diagnosis, although these findings are not necessary. Additionally, consider the possibility of chronic inflammation as a cause for elevation in globulin. Is the nasal disease significant? You could consider crypto titers and further workup for this as a possible source. Additionally, you could consider a protein electrophoresis looking for evidence of underlying neoplastic disease, and screening for vector borne diseases, which could be contributing to the fever and elevation in globulin. Consider an ocular exam, looking for uveitis, which could increase concerns for FIP. An FIP PCR to Auburn

University could be a consideration but is still not definitively diagnostic.

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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