

**DATE PRESENTING CLINICAL SIGNS**

2/2/23

A few days ago: vomiting white foam, one time had orange tinge to it likely from food - started acting funny, has not been himself Has not been interested in eating treats No vomiting since cerenia inj - has not eaten drank or used to the litter box has been noted to hard swallowing and licking his lips excessively Dog has rope toy - concerns that he got ahold of a piece of string. Presented to rdvm 1/31: - Bw: Wbc 25.1 (3.9-19), Neu 22.891 (2.62-15.17), Plt decreased, K 3.1 (3.7-5.2), Ast 76 (16-67) - T4 and SDMA WNL- proBNP pending - Ua: Usg 1.067, pH 8, Pro 3+, Glu 1+ - Tx: cerenia inj

PATIENT

Kovu Yuhase

SPECIES

Feline

Current Medications: Buprenorphine, Unasyn, Sucralfate, Protonix.

Lab Results: See attached.

Radiographs: very gassy throughout GI tract, no obvious FB, but very abnormal gas pattern

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Requested by DVM.

Imaging Performed By: Andi Parkinson, RDMS

BREED

DSH

SEX

Neutered Male

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.

AGE

2/28/10

WEIGHT

9 Pounds

The left kidney has a normal shape and size (3.87 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,
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(Small Animal Internal
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The right kidney has a normal shape and size (3.73 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.

HOSPITAL NAME

Animal Emergency
Hospital

Adrenal Glands

The left adrenal gland is normal in size measuring 0.35 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.

REFERRING VET

Dr. Nacke-Horney

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.

Spleen

The spleen is subjectively normal in size (0.65 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

44677

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 mild fluid. 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.

Most of 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. The jejunum wall measures 0.30 cm. The duodenum measures between 0.13-0.38 cm. Peristalsis appears appropriate. There is a focal section of small bowel extending over 3.5 cm in length with focal wall thickening, significantly decreased wall layering, and surrounding inflammation. In this region, the wall measures at 0.37 cm. There is a small shadowing object visualized within the lumen in the proximal bowel, most consistent with shadowing ingesta, and no evidence of an obstruction at this location.

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 large and hypoechoic to surrounding mesentery. There is no evidence of nodules or cystic lesions. There is evidence of regional mesenteric inflammation. Consistent with mild pancreatitis.

Free Abdomen

There is free abdominal fluid. No lymphadenopathy. The omentum is diffusely hyperechoic, particularly in the region around the abnormal bowel loop.

Thorax

The right auricle and pericardium were visualized and were unremarkable. No obvious pathology is visualized. If cardiac function evaluation is desired a full echocardiogram is warranted.

Despite evidence of ringdown artifact at the level of the diaphragm, there is no evidence of pleural effusion or pulmonary masses visualized. Recommend 3-view thoracic radiographs.

ULTRASONOGRAPHIC FINDINGS

- Hypoechoic, prominent pancreas surrounded by hyperechoic mesentery – 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.
- Mild gastric fluid distention and a small bit of shadowing material in the proximal bowel – If the patient was adequately fasted, this likely represent delayed gastric emptying, although ingested foreign material cannot be definitively ruled out.
- Focal thickened section of small intestine with severely reduced wall layering – Findings would be most concerning for possible infiltrative disease, but other differentials such as an infarct are possible.

- Small volume free abdominal fluid and hyperechoic mesentery – Findings are most consistent with mild peritonitis bacterial versus sterile).

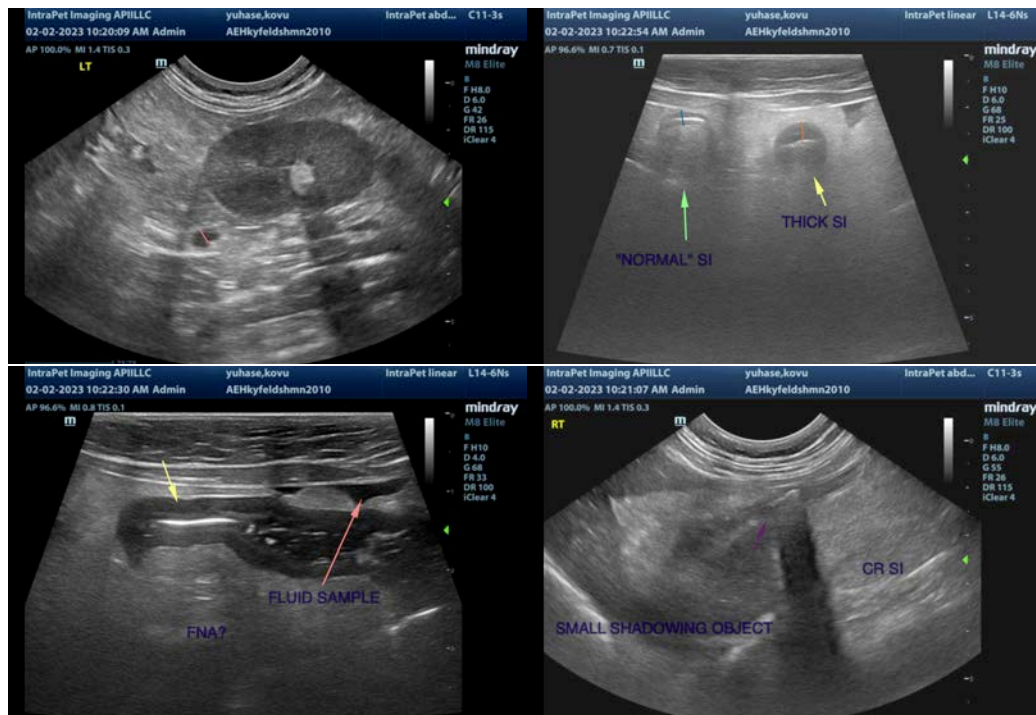
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

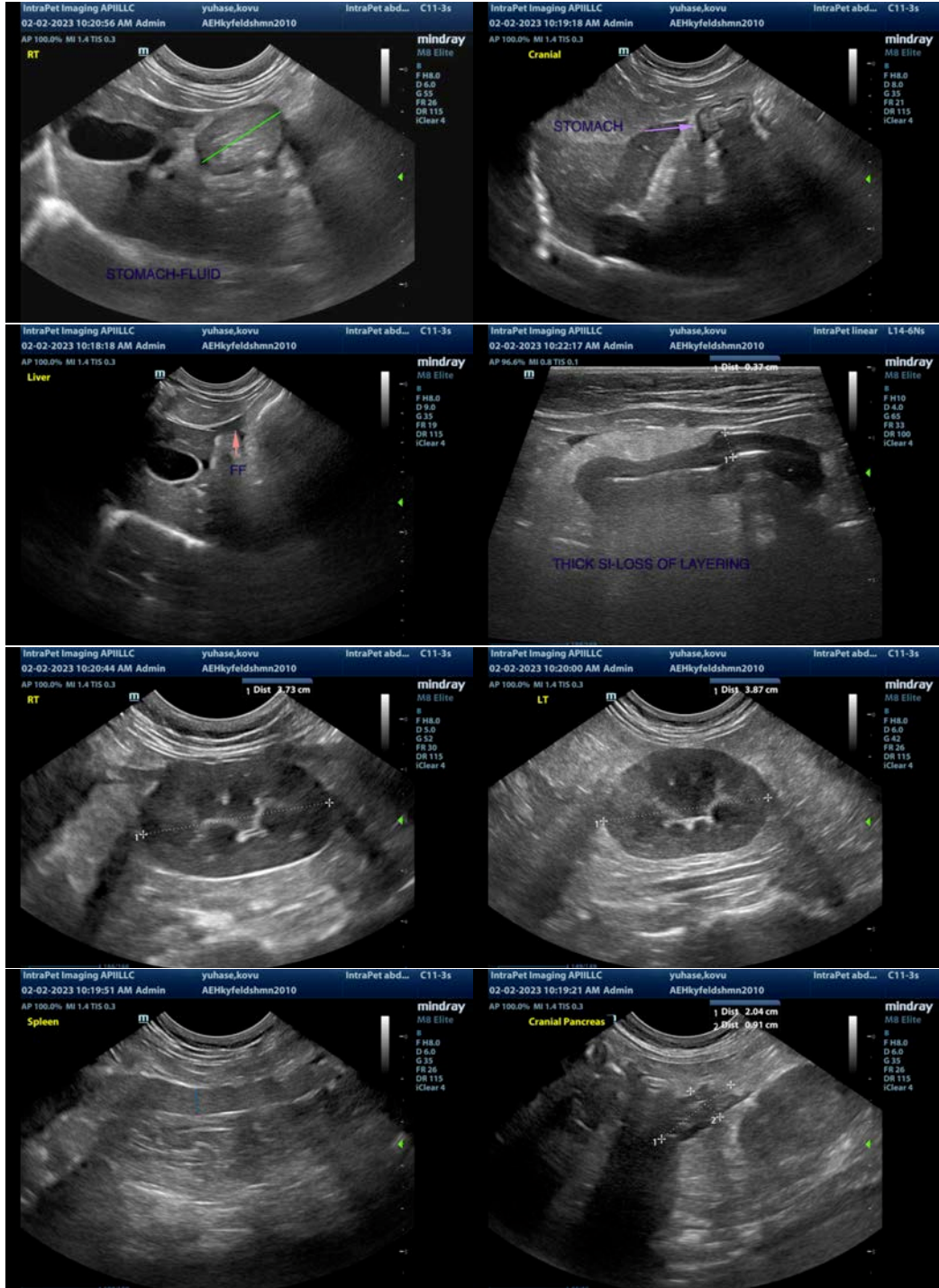
There is a focal section of small intestine that appears dramatically thickened with loss of layering or greatly diminished layering. This is most concerning for possible infiltrative disease, although other differentials such as infarction, etc. are possible. There is a large amount of surrounding inflammation and a small amount of free fluid in the abdomen. Options moving forward would include a fine needle aspirate of the thickened bowel wall and sampling of some free abdominal fluid for fluid analysis, cytology +/- culture, etc.

Additionally, you could consider surgically explore if the patient is stable, with a possibility for bowel resection, or lastly you could continue intensive medical management and continue to monitor this lesion, but there is concern that its presence could cause deterioration of the patient due to a continued inflammatory response.

Recommend three view thoracic radiographs to evaluate for possible concurrent thoracic disease/involvement.

The pancreas is prominent with surrounding hyperechoic mesentery. This could be consistent with mild pancreatic inflammation and there is a small amount of fluid and a small shadowing object visualized in the stomach/proximal small intestine. This does not appear obstructive, but if surgery is performed this area should be evaluated and biopsies obtained of normal appearing small intestine +/- stomach.





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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