

**DATE PRESENTING CLINICAL SIGNS**

1/19/23 Diabetic with chronic history of vomiting. Recently, Tator had increased vomiting and hypoglycemia.

PATIENT

Tator Cakes Cook

Current Medications: Lantus 1U q12h (decreased from 5u BID), Cerenia PO PRN, Gabapentin PRN

Lab Results: 1/5/23: CBC WNL, Chem - Lipase 62 (H), Urinalysis WNL, T4 3.0

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

SPECIES

Feline

Imaging Performed By: Stephanie Warga RDCS, RVT.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**BREED**

DSH

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.

SEX

Neutered Male

The left kidney has a normal shape and size (4.05 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.

AGE

9/27/12

WEIGHT

21.63 Pounds

The right kidney has a normal shape and size (4.68 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,
MS, Diplomate ACVIM
(Small Animal Internal
Medicine)

Adrenal Glands

The left adrenal gland is normal in size measuring 0.50 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

North Laurel AH

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.

REFERRING VET

Dr. Steere

Spleen

The spleen is borderline large (1.2 cm in width at the level of the hilus). It is slightly irregular in shape with scalloped edges. Echotexture is homogenous. The blood flow through the hilus and splenic parenchyma appears normal. No focal parenchymal abnormalities are visualized.

INVOICE

44380

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 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 0.26 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 (primarily the left limb) 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

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

- Hypoechoic, prominent pancreas in the left limb – 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.
- Mildly echogenic debris in the urinary bladder – The echogenic debris in the bladder lumen could be consistent with cells, crystals, and/or mucus.
- Subjectively large spleen with scalloped edges – Findings could be normal for a very large cat or could be consistent with infiltrative disease. A fine needle aspirate could be considered.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

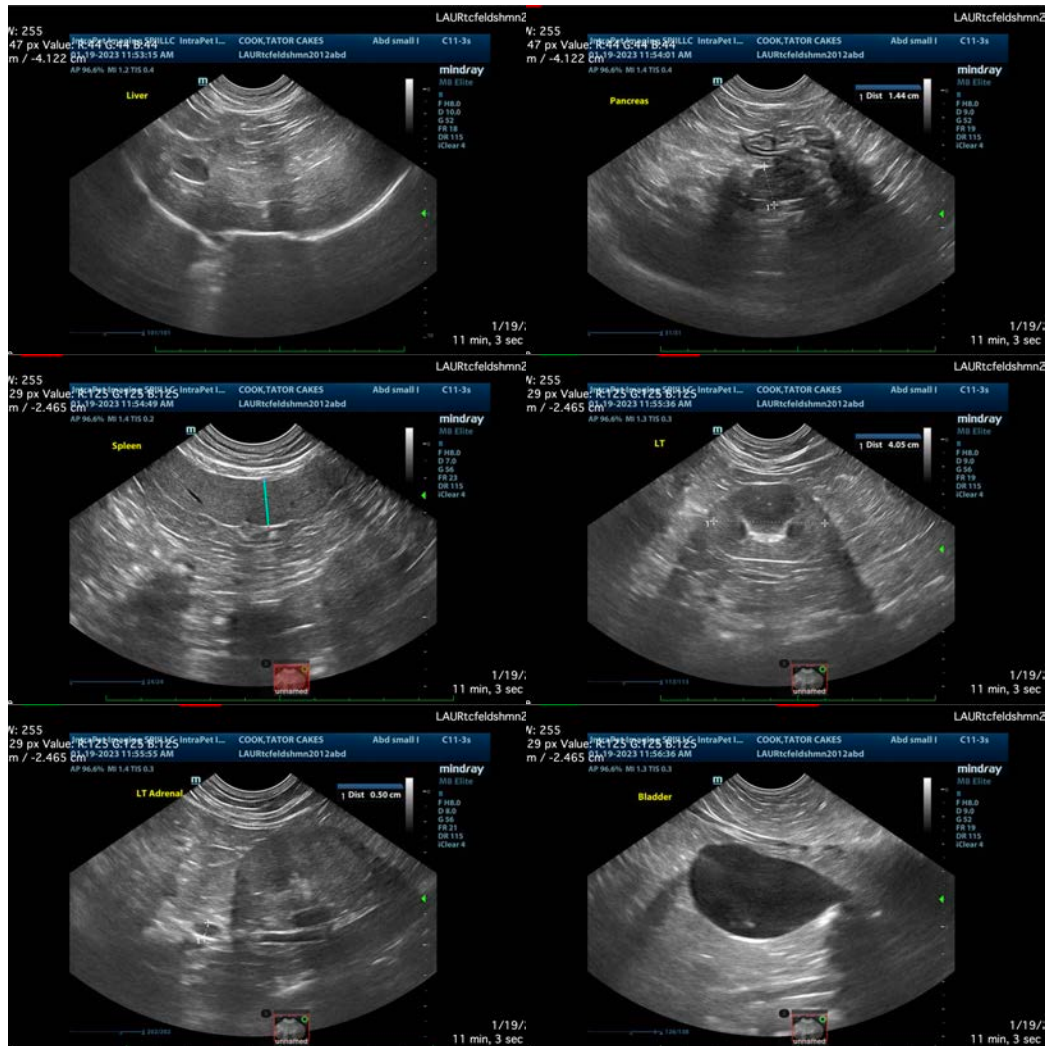
The pancreas is very prominent, particularly in the left limb, medial to the spleen and just caudal to the spleen. There is no evidence of surrounding edema or fluid, but there is concerns that this could be consistent with chronic pancreatitis or previous severe episodes of pancreatitis. Recommend correlation with a quantitative fPLI level and treatment for pancreatitis. If symptoms persist, you could consider a fine needle aspirate.

The spleen appears large with somewhat scalloped edges. This is a very large cat, so this could be normal for this individual. A fine needle aspirate could be considered if round cell neoplasia is high on your differential list.

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

No focal lesions are visualized associated with the gastrointestinal tract to explain the vomiting reported. I suspect it is largely secondary to the pancreas, but additionally there can be significant gastrointestinal disease with minimal ultrasonographic changes.

- 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.
- Consider chronic probiotic therapy.
- If the vomiting persists, you could consider surgical biopsies of the GI tract and pancreas.





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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