

**DATE PRESENTING CLINICAL SIGNS**

9/6/22

PATIENT

Bud-Lite Murphy

SPECIES

Feline

BREED

DSH

SEX

Neutered Male

AGE

4/13/10

WEIGHT

13.2 Pounds

INTERPRETED BY

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

IMAGING PERFORMED BY

Rachel Brilhart RDMS

HOSPITAL NAME

Animal Emergency
Hospital

REFERRING VET

Dr. Kalwa

INVOICE

41045

Known diabetic, owner describes hypoglycemic event, ADR earlier, then had seizure, on 3 units Lantus BID last given at 9am ATO in room: - Mom (owner, elderly)) and daughter (gives insulin) in room. - Over last few weeks unsure if vomiting, more lethargic last few days. Thinks he is vomiting once a day - O has multiple cats - O doesnt meal feed- Os free feed dry and feed wet in the middle of the say a snack in the afternoon - This am (Os dont make sure he is eating prior to give insulin) didnt see him eat, gave insulin. - This afternoon laying on sofa- purred- 2 hrs later by door. Found him have a seizure- funny smell- thought he died- Unsure if anal glands. No changes in drinking/ urinating, No changes in insulin brand rDVM appt thursday History: - Known diabetic at least 3 years. Has been on 3 Units lantus BID 7a/7-8p for the last 2 yrs (previously at 4 units). Had bladder issue ~2 yrs ago thought from issue with giving insulin. - As a kitten heart issue after neuter- resolved after a week - Heart murmur as a kitten- not heard as an adult - Declawed - Peees outside the litterbox- has been doing this the last year, uses pee pads.

Current Medications: Dextrose.

Lab Results: See attached.

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

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 (4.36 cm) with pyelectasia at 0.25 cm and small non-obstructive nephroliths. Overall echogenicity is slightly hyperechoic with poor 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 infarcts or hydroureter. Renal vasculature is normal.

The right kidney has a normal shape and size (4.33 cm) with pyelectasia at 0.47 cm. Overall echogenicity is slightly hyperechoic with poor 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 nephroliths, infarcts or hydroureter. Renal vasculature is normal.

Adrenal Glands

The left adrenal gland is normal in size measuring 0.43 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 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.

Spleen

The spleen is normal/borderline large (1.1 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. There is a discrete hyperechoic nodule visualized in the liver measuring 1.09 cm x 1.03 cm.

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 is mildly dilated with fluid. Some of the stomach wall appears relatively normal in thickness (0.38 cm) with intact layering. A large portion of the stomach wall appears diffusely thickened, measuring 0.50 cm with significantly reduced distinction of wall layering. There is no impression of reduced peristaltic activity. Findings are concerning for focal gastric wall thickening.

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 measured 0.41 cm. Jejunum wall measured 0.30 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. The gastric lymph node appears prominent at 0.53 cm, and the omentum is hyperechoic around the stomach.

PRIMARY FINDINGS

- Echogenic debris in the urinary bladder – The echogenic debris in the bladder lumen could be consistent with cells, crystals, and/or mucus.
- Decreased corticomedullary distinction in both kidneys with bilateral pyelectasia and small nephroliths – Pyelectasia of the kidney(s) could be consistent with pyelonephritis, chronic renal disease, secondary to PU/PD or fluid therapy (if applicable), other.

SECONDARY FINDINGS

- Borderline enlarged spleen – I suspect this is normal secondary to this being a large cat. Given the concern for round cell neoplasia, a fine needle aspirate could be considered.
- Hyperechoic liver nodule – This could represent a benign or neoplastic lesion.
- Focal gastric wall thickening – Consider such differentials as edema, inflammation, or infiltration/neoplasia.

- 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.
- Prominent gastric lymph node – The prominent abdominal lymph nodes are most consistent with reactive lymphadenitis or lymphoid hyperplasia. Neoplastic infiltration is considered less likely.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

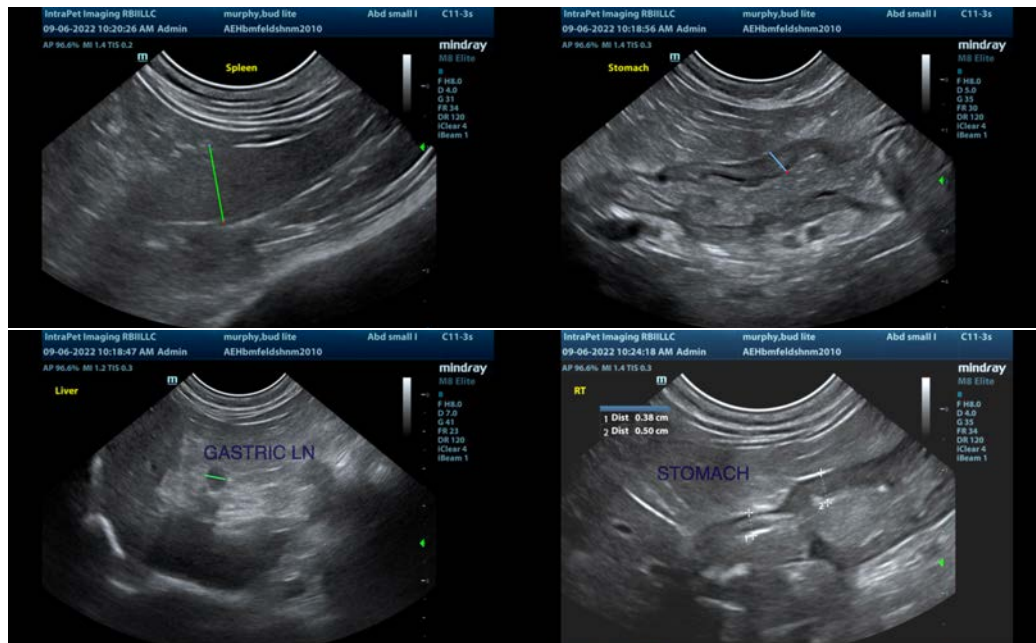
A large portion of the gastric wall appears thickened with reduced distinction of wall layering. This could be consistent with severe gastritis but is concerning for the possibility of a neoplastic lesion. If symptoms and the thickening persist despite treatment for gastritis, recommend a biopsy of the gastric wall.

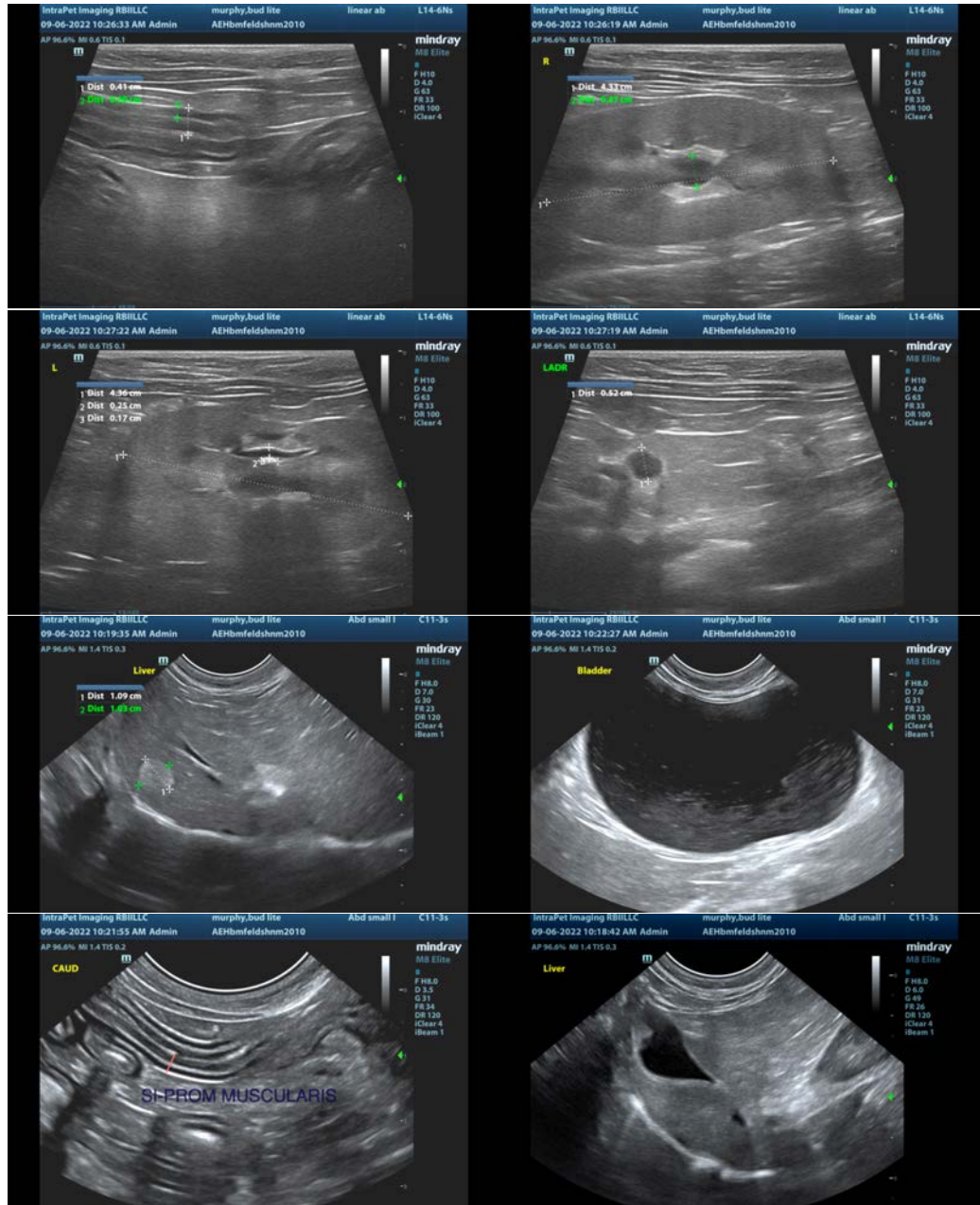
Recommend three view thoracic radiographs to evaluate for possible concurrent thoracic disease/involvement.

Based on the renal pelvic dilation and the echogenic debris in the urinary bladder, recommend urinalysis and culture to screen for pyelonephritis/cystitis.

The nature of the hyperechoic nodule in the liver is uncertain. It is likely too deep to easily sample at this time. Recommend continued monitoring.

Consider a GI panel to Texas A&M for a qualitative fPLI, TLI, cobalamin and folate to further evaluate the GI tract and pancreas. Recommend treatment for gastritis and reevaluation of the stomach wall, as there is concern for underlying neoplastic disease, and a biopsy may be necessary.





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.

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