

**DATE PRESENTING CLINICAL SIGNS**

4/5/23 Presented 3/31 for PUPD, elevated liver enzymes, weight loss. GGT intermittently elevated since at least 2021, new recent ALP elevation. Otherwise clinically well at home. History of blindness/cataracts. Abdominal mass palpated on PE.

PATIENT

Loki Howell

Current Medications: Milk thistle/Sam E.
Lab Results: 3/22: ALP 120, GGT 39, Alb 2.9

SPECIES

Feline

Date of Previous IntraPet Ultrasound: No previous.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.
Imaging Performed By: Andi Parkinson, BS, RDMS.

BREED

DLH

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**SEX**

Spayed Female

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

3/30/08

The left kidney has a normal shape and size (2.91 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.

WEIGHT

2.9 kg

The right kidney has a normal shape and size (2.94 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 region of left adrenal (Cranial to left renal artery) is unremarkable but the adrenal is not distinctly visualized. No evidence of a mass effect is visualized.

HOSPITAL NAME

Nexus Vet Specialists

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.

REFERRING VET

Dr. Steele

Spleen

The spleen is normal in size but irregular in shape. The blood flow through the hilus and splenic parenchyma appears normal. There is a hypoechoic vascular mass effect visualized associated with the spleen, measuring approximately 1.01 cm x 0.98 cm.

INVOICE

46421

Liver

The liver is large in size and irregular. The parenchyma is heterogenous in echotexture with subtle, indistinct focal mottling. The visible portions of the vasculature and biliary tract appear normal. There is a large, irregular, hyperechoic, multiloculated/septate cystic mass effect associated with the liver measuring at least 6.62 cm x 4.94 cm.

The gallbladder lumen is significantly distended. The wall of the gall bladder is not thickened and has a smooth mucosal surface. Luminal contents are mild and primarily anechoic. Visualization of the bile duct is obscured by the hepatic mass.

Gastrointestinal

The stomach contains a moderate to large amount of shadowing ingesta. 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 0.27 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 area of 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 a small cluster of prominent mesenteric lymph nodes visualized measuring 0.33, 0.34, and 0.21 cm with surrounding hyperechoic mesentery. Additionally, the mesentery is hyperechoic in the cranial abdomen around the hepatic mass.

Other

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.

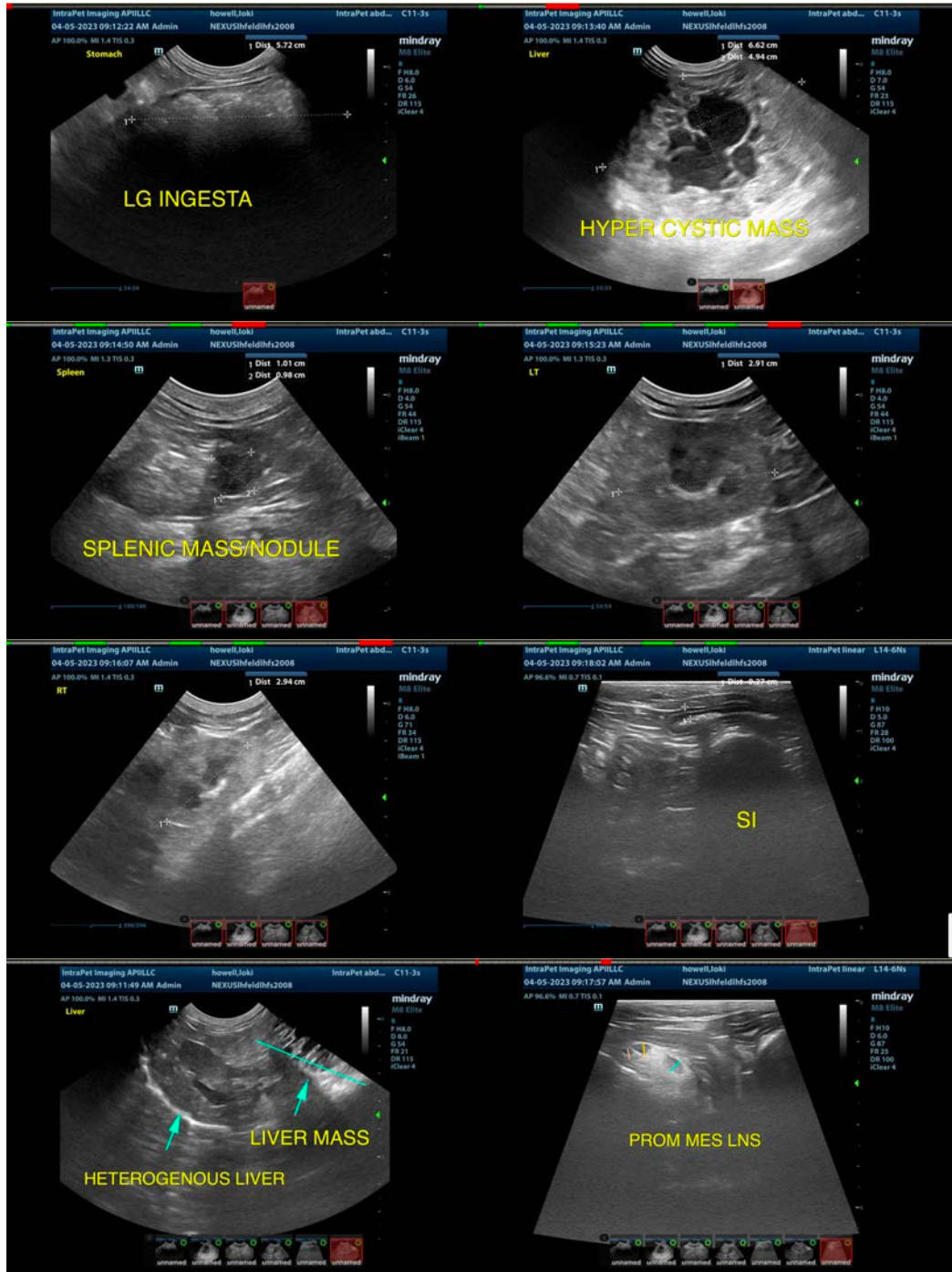
ULTRASONOGRAPHIC FINDINGS

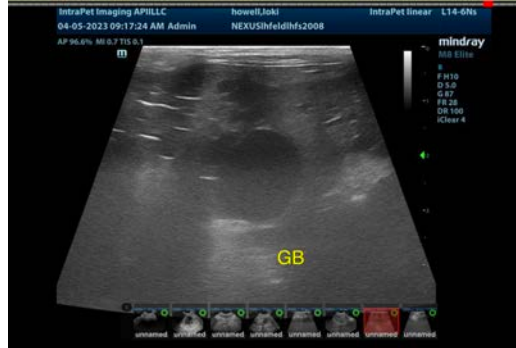
- Hypoechoic mass effect associated with the spleen – This lesion appears hypoechoic, and cavitation cannot be ruled out. Differentials include lymphoid hyperplasia, extramedullary hematopoiesis, infiltrative neoplasia, inflammation, or other.
- Severely heterogeneous liver with an irregular hyperechoic multiloculated cystic mass – The diffuse hepatic changes are non-specific and could be consistent with vacuolar hepatopathy, nodular hyperplasia, inflammatory/immune-mediated disease, fibrosis, extramedullary hematopoiesis, toxic hepatopathy (e.g., copper), infiltrative neoplasia (less likely) or other hepatopathy. The cystic mass effect is most consistent with a cystadenoma, although other differentials are possible.
- Significant gallbladder distention – The significance of this is unclear. This could be incidental or due to increased resistance/partial obstruction secondary to the mass effect.
- Prominent mesenteric lymph nodes – 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

Ultrasonographic abnormalities include a severely heterogeneous, irregular liver with a hyperechoic multiloculated mass effect, a hypoechoic/possibly cystic splenic mass, a distended gallbladder, a moderate amount of ingesta within the gastric lumen, and some mildly prominent mesenteric lymph nodes.

Further diagnostic and therapeutic recommendations regarding this exam to be made by Dr. Cara Steele.





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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