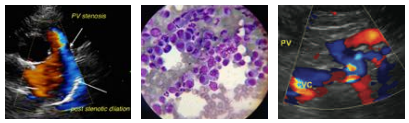
IMAGING PERFORMED BY

IntraPet.com



SonoPath
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DATE
1/26/22

PATIENT
Pepper Lykens

SPECIES
Canine

BREED
Labrador Retriever

SEX
Spayed Female

AGE
3/23/09

WEIGHT
69.4 lbs

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

HOSPITAL NAME
Banfield Pet Hospital of Towson

REFERRING VET
Dr. Chadha

INVOICE
95560

PRESENTING CLINICAL SIGNS

History: Pet presented for lethargy, diarrhea on 01/19 for about 3 days.
Low appetite. No vomiting noted. Pancreatitis +/- mass originating from liver.
Current Medications: "Supportive care"
Lab Results: Positive for pancreatitis, Cbc wnl, Alkp mild elevation.
Radiographs: Soft tissue opacity noted caudal abdomen suspicious of mass originating from liver.
Date of Previous IntraPet Ultrasound: No previous IntraPet scans.
Sedation: Torbugesic IV.
Stat Report: Not requested.
Imaging Performed By: Stephanie Pearce 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 (6.01 cm). Overall echogenicity is slightly hyperechoic with poor corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. Small, non-obstructive nephroliths were noted. There is no evidence of pyelectasia, infarcts or hydroureter. Renal vasculature is normal.

The right kidney has a normal shape and size (6.37 cm). Overall echogenicity is slightly hyperechoic with poor corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. Small, non-obstructive nephroliths were noted. There is no evidence of pyelectasia, infarcts or hydroureter. Renal vasculature is normal.

Adrenal Glands

The left adrenal gland is normal in size measuring 0.71 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 0.78 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 not clearly visualized as it is largely intracostal and cannot be visualized in its entirety. No lesions were visualized

Liver

The liver is subjectively large in size, heterogenous and hypoechoic with irregular contours. The visible portions of the vasculature and biliary tract appear normal. While no large, focal mass effect is visualized there are numerous, ill-defined nodules within the liver and along the scalloped margins varying in size from approximately 0.5-1.5 cm. The right caudal lobe appears to have irregular margins. The gallbladder lumen is moderately distended. The wall of the gallbladder is not thickened and has a smooth mucosal surface. There is a moderate amount of non-organized echogenic debris. The cystic and common bile ducts are normal/not visible.

Gastrointestinal

The stomach contains minimal luminal contents. It measures at a normal thickness of <0.7cm 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 uniform diameter with minimal fluid distension. Wall appears subjectively, mildly increased .The duodenum measured 0.44 cm and the jejunum measured 0.41 cm. Bowel loops follow a typical curvilinear path with distinct wall layering. 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 prominent and mottled 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. There is occasional, prominent mesenteric lymph nodes measuring 0.44 cm, 0.47 cm and 0.32 cm. The omentum is of normal uniform echogenicity.

ULTRASONOGRAPHIC FINDINGS

PRIMARY FINDINGS:

- Large, irregular, heterogenous liver with irregular margins. 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.

- Prominent, mottled pancreas. The pancreatic changes are most consistent with age-related parenchymal remodeling, potentially secondary to a prior inflammatory episode, early fibrosis or chronic pancreatitis.

- Mild gallbladder debris. The significance of the aggregated gallbladder debris is unclear. This could represent an early mucocele, cholestasis, or may be secondary to fasting.

- Subjectively thickened small intestine. The mild small intestinal wall changes may be a normal variant in this patient or could be consistent with an inflammatory process (e.g., inflammatory bowel disease).

- Decreased corticomedullary distinction in both kidneys with small, non-obstructive nephroliths. The bilateral renal findings are consistent with age-related change.

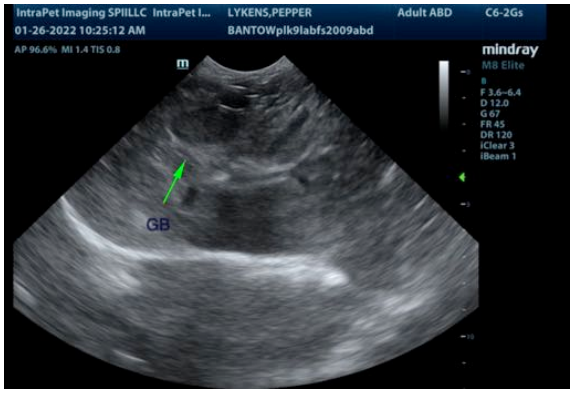
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

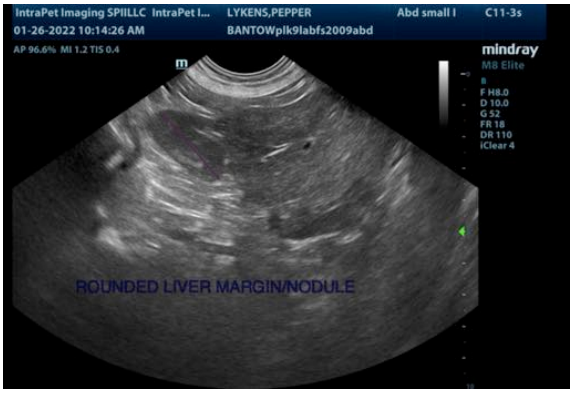
A large focal lesion involving the gastrointestinal tract is not observed although you can still have significant small intestinal disease with fairly minimal ultrasonographic findings.

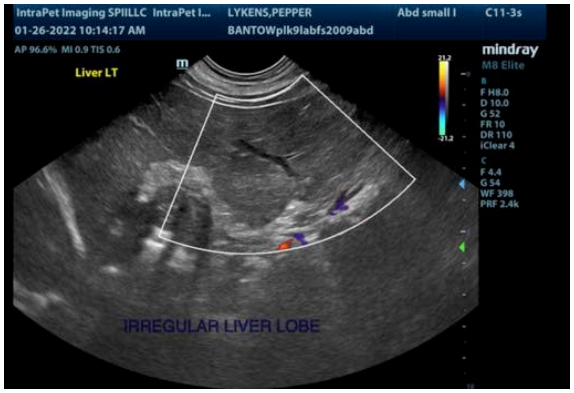
Potential differentials include: non-apparent foreign material, dietary indiscretion, dietary intolerance, dysbiosis, GI parasites, IBD and less likely intestinal neoplasia.
I recommend supportive care for acute gastroenteritis with accompanying radiographs to look for any evidence of foreign material.

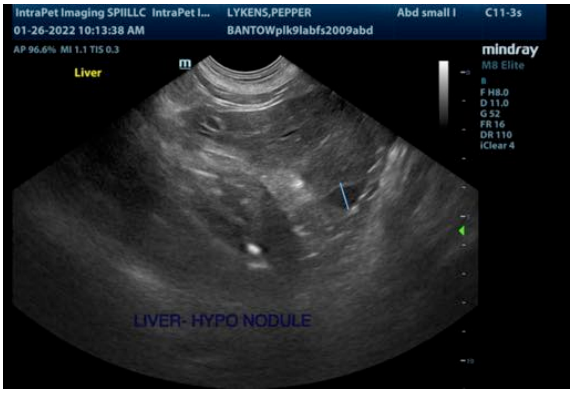
The liver is irregular and heterogenous with a somewhat nodular appearance. These are non-specific findings that can be seen with benign or cancerous change within the liver.

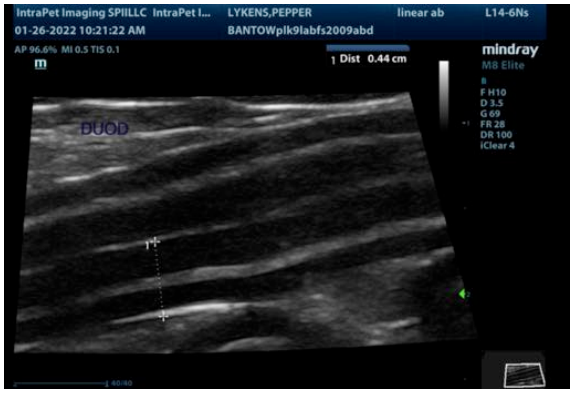
- I recommend a FNA of the irregular/caudal portion of the liver.
- I recommend three view thoracic radiographs to rule out concurrent intrathoracic disease.
- If clinical signs persist despite supportive care for acute liver injury and gastroenteritis then you may need to consider biopsies of the liver and small intestine.

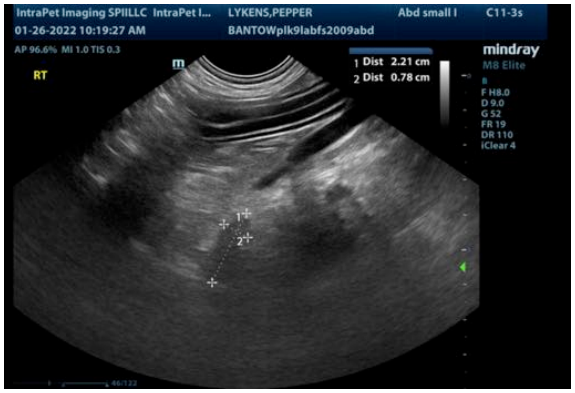


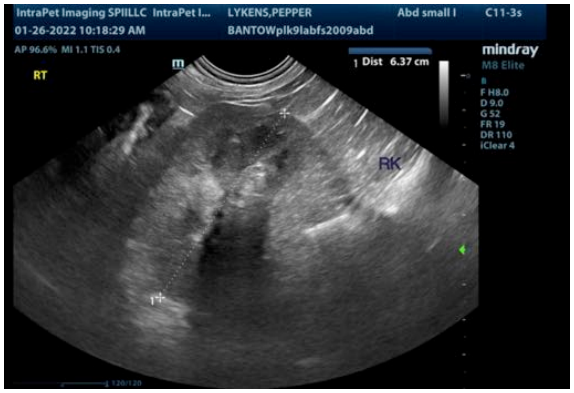


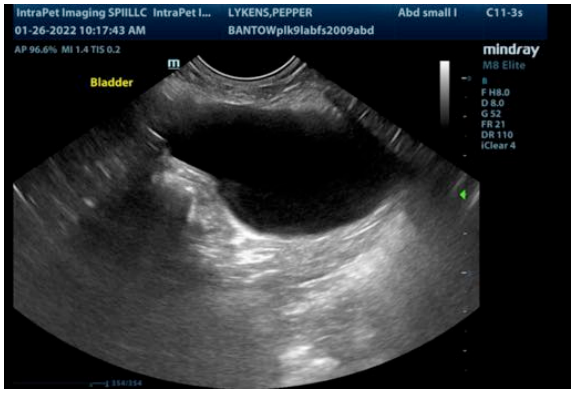


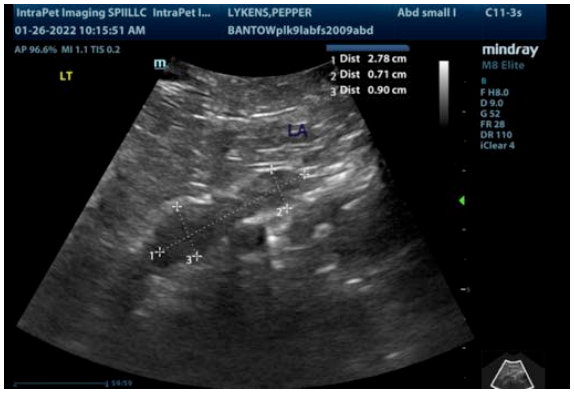


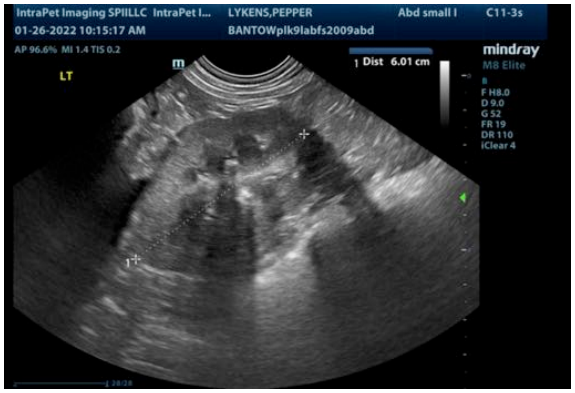












The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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