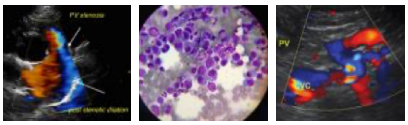
IMAGING PERFORMED BY

IntraPet.com



SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
1-800-838-4268 info@sonopath.com SonoPath.com

DATE

9/2/21

PATIENT

Lolly Guerra

SPECIES

Canine

BREED

Beagle

SEX

Female, spayed

AGE

11/9/2010

WEIGHT

50.2 lbs.

INTERPRETED BY

Andrea Nicastro, DVM, Diplomate ACVIM (*Small Animal Internal Medicine*)

HOSPITAL NAME

Bayside Animal Medical Center

REFERRING VET

INVOICE

12012

PRESENTING CLINICAL SIGNS

History: vomiting/ diarrhea, chronic elevated liver enzymes. Treating for colitis currently.

Current Medications:
Lab Results: ALKP 532, ALT normal, T-bili 0.8, low BUN 8.4, normal T4, CBC mildly low platelets. 4DX negative in June of 2021. .
Radiographs: Hepatomegaly, irregular splenic borders on radiographs. No evidence of cardiopulmonary disease.
Date of Previous IntraPet Ultrasound: No previous IntraPet scans.
Sedation: Sedation not required for scan.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder, trigone, and pelvic urethra are normal in thickness and the mucosal surface is smooth. The bladder lumen is moderately distended with mostly anechoic urine. No masses, inflammatory changes or calculi are observed. Ureteral papillae and visualized portion of the proximal urethra, visible to a depth of 2 cm, are normal.

The left kidney is normal size (6.42 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The right kidney is normal size (6.61 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal to mild loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

Adrenal Glands

The left adrenal gland is enlarged (1.35 cm cranial; 1.37 cm caudal; 3.31 cm length) with a slightly irregular shape. A 1.42 x 1.20 cm hyperechoic to heterogeneous nodule is observed at the cranial pole. A 1.21 x 1.21 cm echogenic nodule is observed at the caudal pole. Glandular echogenicity and detail are obscured by the nodules. The phrenicoabdominal vein and surrounding vasculature appeared normal.

The right adrenal gland is mildly enlarged (0.44 cm cranial; 0.73 cm caudal; 1.89 cm length). Normal shape and glandular echogenicity. The phrenicoabdominal vein and surrounding vasculature are normal.

Spleen

The spleen is normal in size (1.77 cm in width at the level of the hilus) with a normal capsular contour. There is appropriate echogenicity and echotexture. A 1.08 x 0.72 cm heterogeneous nodule is observed within the parenchyma. In addition, several small (<1 cm) hypoechoic nodules are seen throughout the organ. Splenic vasculature is normal with no evidence of thrombosis.

Liver

The liver is subjectively prominent in size with swollen curvilinear peripheral contours. The parenchyma is isoechoic relative to the spleen and exhibits mild heterogeneity. No distinct focal lesions are observed. Hepatic vasculature and biliary tracts are of normal volume with no evidence of congestion. The gall bladder lumen is moderately distended. A small to moderate amount of aggregated echogenic adherent sludge in a partially stellate pattern is observed within the lumen. The cystic and common bile ducts are normal/not seen.

Gastrointestinal

The stomach and intestine are free of stasis and exhibit normal peristaltic activity. The gastric lumen is not distended. The gastric wall and pylorus are normal in thickness with a normal layering pattern. The pyloric outflow tract is patent. The small intestinal lumen is not dilated. The small intestinal wall thickness is normal with a normal layering pattern and appropriate mural detail. Discreet masses are not identified. The colonic wall is normal. No obstructive disease is noted.

Pancreas

The right limb of the pancreas is visible with normal curvilinear peripheral contours. The parenchyma is largely hyperechoic relative to surrounding omental fat and slightly mottled in appearance. The pancreatic duct is visible but not overtly dilated. There is no evidence of peripancreatic inflammation or effusion.

Free Abdomen

The peritoneal cavity is normal. There is no evidence of inflammation or effusion. The abdominal lymph nodes are normal/not visible.

Other

A brief echocardiogram reveals no evidence of pericardial effusion or obvious right atrial/auricular mass.

ULTRASONOGRAPHIC FINDINGS

Primary Findings:

- The diffuse hepatic changes are non-specific and could be consistent with vacuolar hepatopathy, regenerative nodular hyperplasia, and/or age-related remodeling. Inflammatory and infiltrative disease are considered less likely.
- The gallbladder sludge could be secondary to cholestasis. However, a developing mucocele cannot be completely excluded.

Secondary Findings:

- The pancreatic changes are most consistent with age-related parenchymal remodeling, potentially secondary to a prior inflammatory episode, early fibrosis or chronic pancreatitis.
- Bilateral adrenomegaly with left adrenal nodules, likely hyperplastic with a lower possibility of neoplasia.
- Minor age-related renal changes.
- The splenic nodules trend toward the benign with potential for emerging neoplasia, particularly the larger heterogeneous nodule.

*An obvious cause for the patient's gastrointestinal signs is not identified in this study. Considerations include microscopic gastrointestinal or pancreatic disease, underlying metabolic issue, other.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The following diagnostics/treatment recommendations can be considered:

1. Serum cobalamin, folate, PLI and TLI
2. A fecal evaluation for ova/Giardia
3. Prophylactic deworming with Fenbendazole at 50 mg/kg once a day for 5 days is recommended. Repeat above protocol in 3 weeks.
4. A 6-week limited antigen diet trial to assess for food allergies.
5. Consider a 4-week course of Tylosin as empirical treatment for small intestinal bacterial overgrowth.

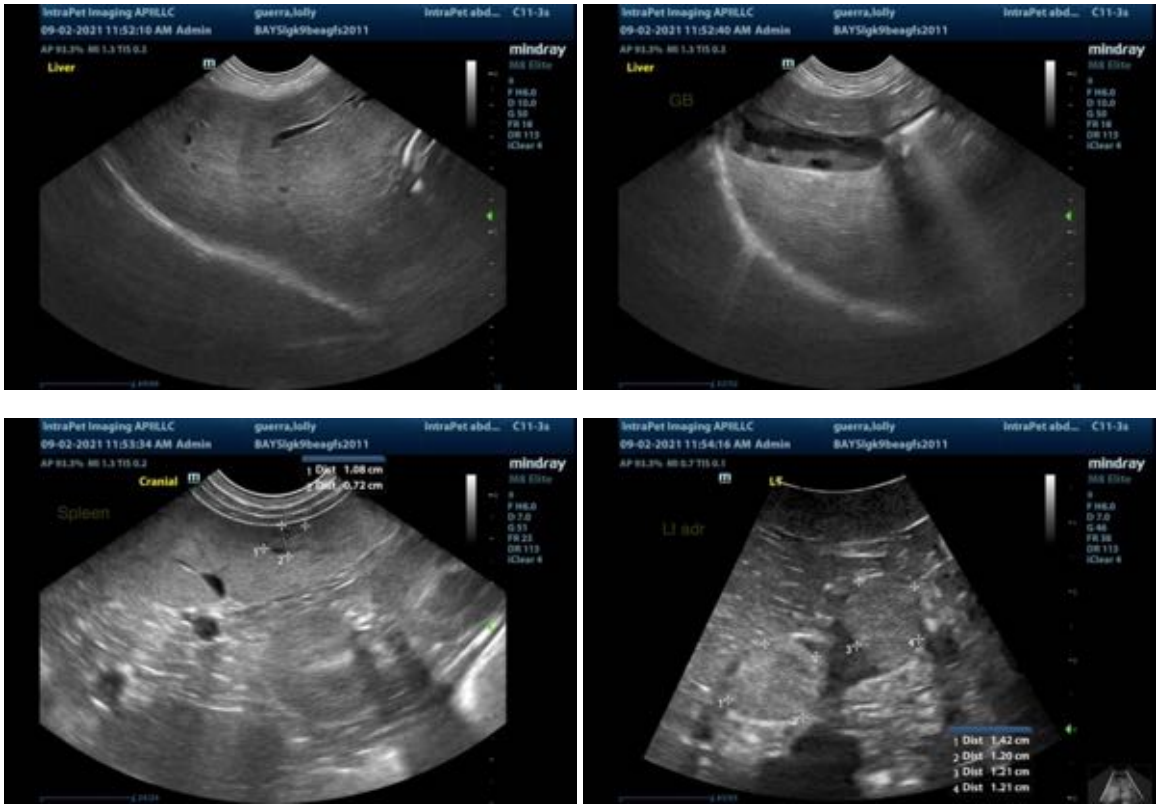
6. A resting cortisol level to screen for hypoadrenocorticism. If resting cortisol level is < 2.0 mcg/dL, an ACTH stimulation test is recommended.

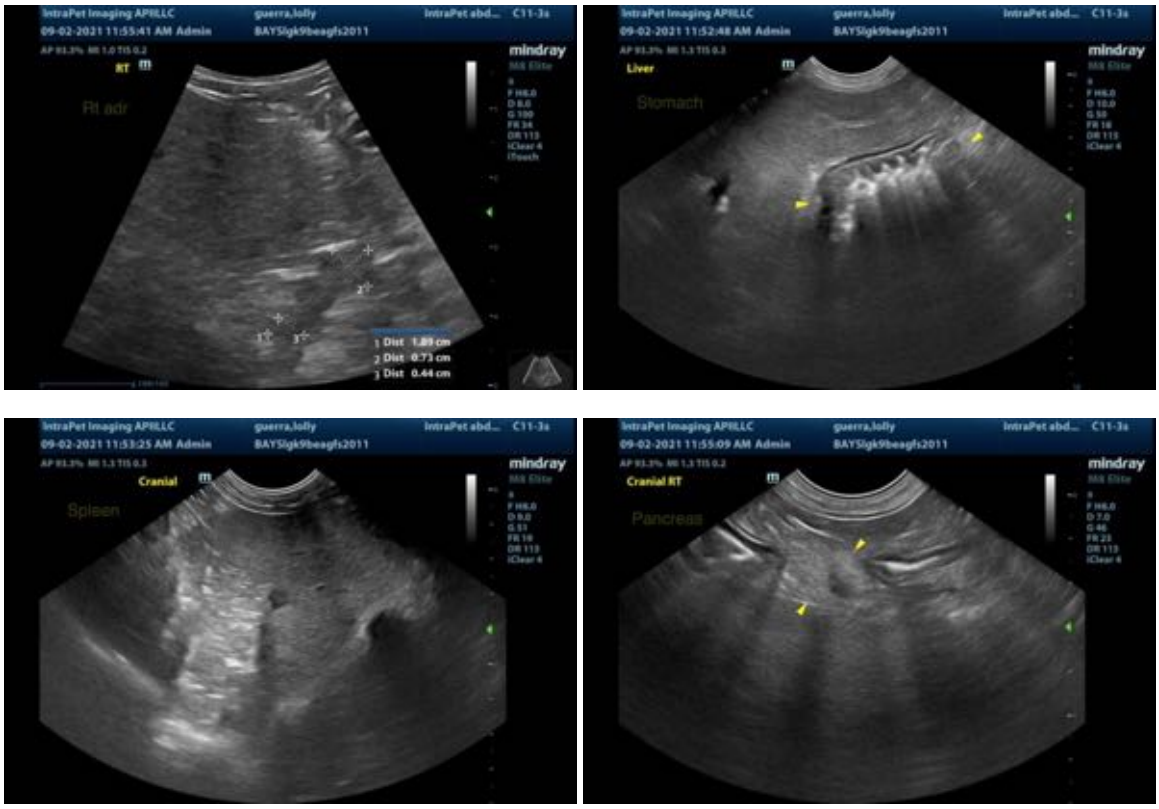
7. Depending on the results of the above diagnostics/therapeutics, endoscopic or surgical gastrointestinal biopsies may be warranted.

8. Three-view thoracic radiographs should be performed prior to any anesthetic event.

9. Serial monitoring (i.e., every 3-4 months) of the patient's liver values is recommended. If values continue to increase, hepatic tissue sampling (i.e., fine needle aspirate or biopsy) may be warranted.

10. Consider a repeat abdominal ultrasound in 3-4 weeks to assess for progression of the splenic nodules and gallbladder changes. Ideally, a small meal would be administered 2 hours pre-scan to allow for gallbladder contraction. If changes are similar to the current scan, consider initiation of Ursodiol therapy.





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.

Andrea Nicastro, DVM, Diplomate ACVIM (*Small Animal Internal Medicine*)
Andrea.nicastro@sonopath.com