

**DATE PRESENTING CLINICAL SIGNS**

4/11/22

Previous Abdominal ULTRASONOGRAPHIC FINDINGS: The hepatic parenchymal changes are non-specific and could be associated with vacuolar hepatopathy (i.e. idiopathic, endocrine), regenerative nodular hyperplasia. If the ALT is normal or low normal, inflammatory/immune mediated disease and infiltrative neoplasia are considered less likely.

PATIENT

Lindy Perales

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

SPECIES

Canine

x Bilateral chronic renal changes with dystrophic mineralization

P presented Feb 28th for increased vomiting. In general V about once a week within the past few weeks. before this v every once in a while but has recently increased in frequency.

BREED

Mixed Breed

Current Medications: Tramadol Give 1/2 tablet[s] by mouth every 12-24 hours as needed for pain. Gabapentin 50mg Give 1 tablet every 12 hours. Trazodone 50mg Give 1/4 tablet by mouth every 8 hours as needed for anxiety. Dorzolamide/Timolol drops BID OU

Lab Results: Labwork from March 2nd: USG 1040. Creat 1.2, BUN 38, ALT 259, ALKP 147, GGT 17, Spec CPL 435.

SEX

Female, spayed

Date of Previous IntraPet Ultrasound: 11/17/20. See attached.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

AGE

7/1/2007

Imaging Performed By: Andi Parkinson, RDMS.

WEIGHT

18.8 lbs.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**Urinary System**

The bladder lumen is moderately distended. The wall is normal in thickness with a smooth mucosal surface. Luminal contents are anechoic. No cystic calculi are observed. the region of the trigone is normal.

INTERPRETED BY

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

The left kidney is normal size (4.12 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with mild loss of corticomedullary distinction. Trace pyelectasia is present. There is no evidence of nephroliths, infarcts or hydroureter.

The right kidney is normal size (4.45 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with mild loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter.

HOSPITAL NAME

Warm & Fuzzy Vet

Adrenal Glands

The left adrenal gland is normal size (0.47 cm at cranial pole) (0.56 cm at caudal pole) (1.80 cm in length); normal shape; homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

REFERRING VET

Dr. Hepner

The right adrenal gland is normal size (0.33 cm at cranial pole) (0.46 cm at caudal pole) (2.00 cm in length); normal shape; homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

INVOICE

13178

Spleen

The spleen is normal in size (1.79 cm in width at the level of the hilus) with a normal capsular contour. There is appropriate echogenicity and echotexture. No focal lesions are observed. Splenic vasculature is normal.

Liver

The liver is subjectively enlarged with slightly swollen peripheral contours. The parenchyma is isoechoic relative to the spleen and diffusely homogeneous in appearance. No distinct focal lesions are observed. Vascular and biliary tracts are of normal volume with no evidence of congestion. The gall bladder lumen is moderately distended. The wall is thin and smooth. A small amount of mostly gravity-dependent echogenic debris is observed within the lumen. The cystic and common bile ducts are normal/not seen.

Gastrointestinal

The gastric lumen is not distended. The gastric wall in the region of the fundus is normal in thickness with a normal layering pattern. In the region of the pyloric antrum, the wall is mildly thickened (up to 0.74 cm) with retention of the normal layering pattern. The pyloric outflow tract is patent. The mesentery effacing the serosal surface of the pyloric outflow tract is mildly hyperechoic. The small intestinal lumen is not dilated. The small intestinal wall thickness is normal with a normal layering pattern and appropriate mural detail. The colonic wall is normal. No obstructive disease is noted.

Pancreas

The base and right limb of the pancreas are prominent in size with minimal deviation from the normal peripheral contours. The parenchyma is mildly hyperechoic relative to surrounding omental fat and heterogeneous in appearance. No distinct focal lesions are observed. The pancreatic duct is not overtly dilated.

Free Abdomen

There is no evidence of free fluid. The abdominal lymph nodes are normal/not visible.

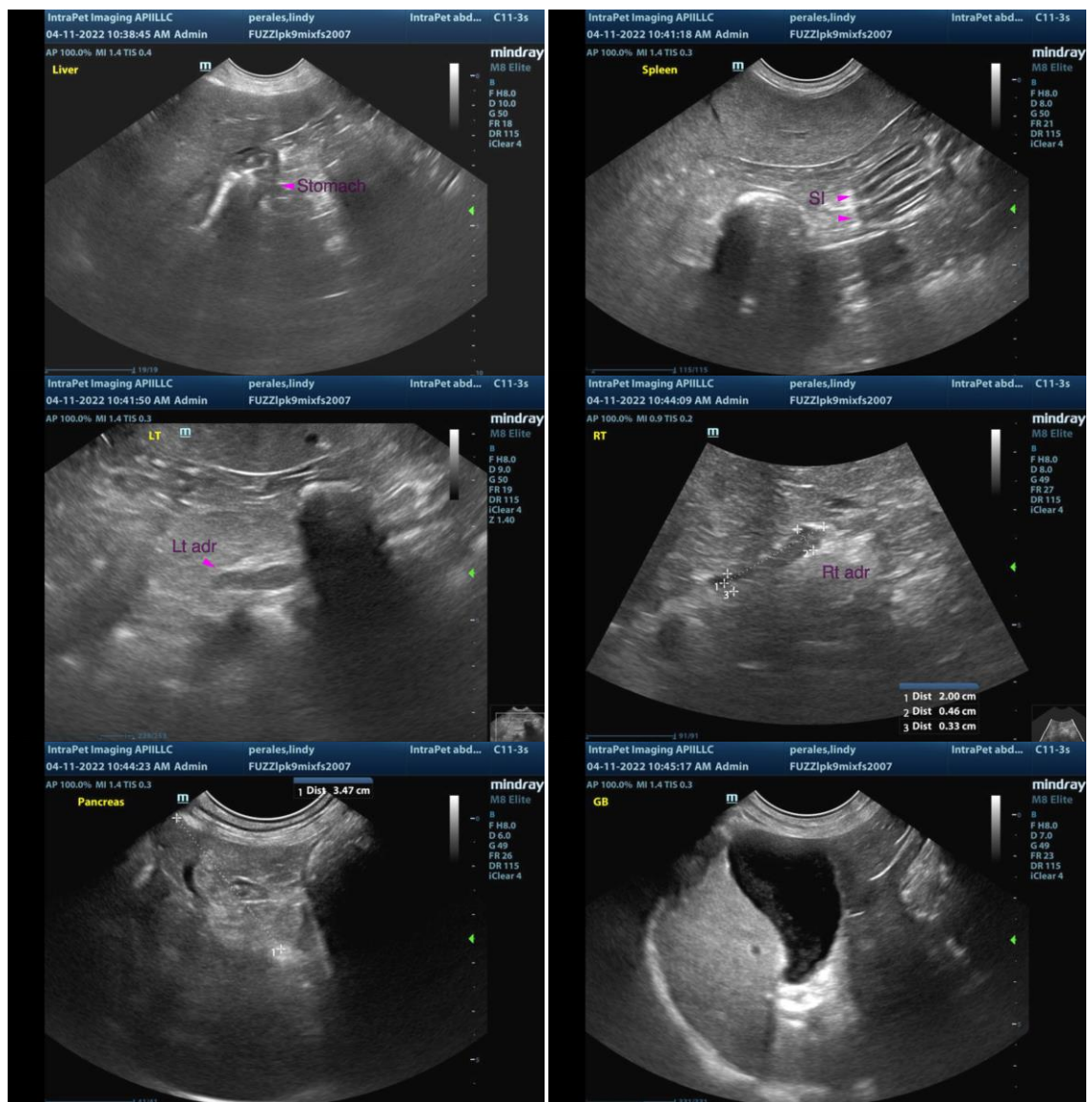
ULTRASONOGRAPHIC FINDINGS

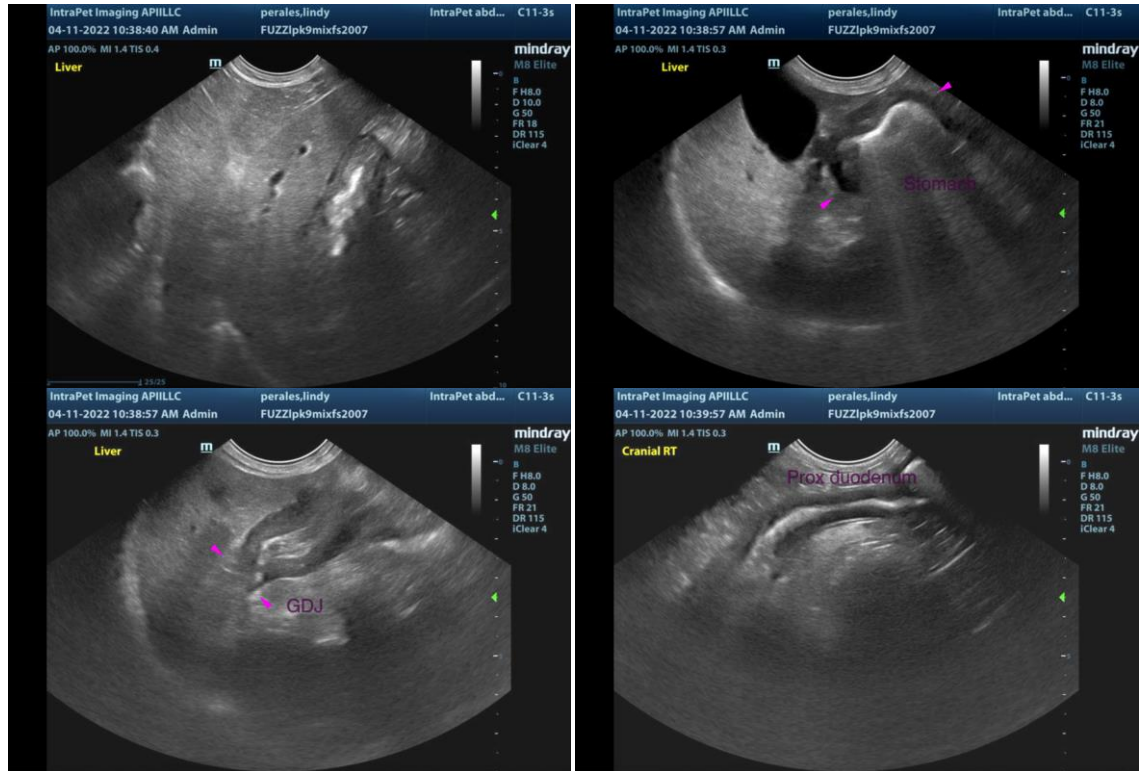
- The pyloric antral wall changes could be consistent with inflammation, hypertrophy, or less likely, emerging neoplasia. Subtle regional peritonitis is present.
- The pancreatic changes are most consistent with age-related remodeling and fibrosis. Mild pancreatitis may also be present, particularly if the patient exhibits cranial abdominal pain on palpation.
- Non-specific diffuse hepatopathy. Differentials include inflammatory hepatopathy (i.e., chronic active hepatitis, bacterial cholangiohepatitis), copper hepatotoxicosis, Leptospirosis +/- concurrent age-related change (i.e., vacuolar hepatopathy, regenerative nodular hyperplasia).
- Gallbladder debris, incidental.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- Thoracic radiographs (three-view) are recommended to assess for occult esophageal disease.
- Other diagnostic/therapeutic considerations include the following:
 1. Pre- and post-prandial serum bile acids.
 2. Leptospirosis testing (i.e., blood and urine PCR, serology)
 3. GI panel including serum cobalamin, folate, TLI and PLI.

4. A resting cortisol level to screen for hypoadrenocorticism. If resting cortisol level is < 2.0 mcg/dL, an ACTH stimulation test is recommended.
5. Fecal evaluation for ova/Giardia.
6. Six-week hypoallergenic diet trial.
7. Depending on the results of the above diagnostics, an abdominal exploratory with hepatic and gastrointestinal biopsies may be necessary to get a definitive diagnosis. If surgery is pursued, aerobic and anaerobic bile cultures should also be obtained along with acquisition of additional hepatic tissue samples for potential copper quantitation.





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.

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