

**DATE PRESENTING CLINICAL SIGNS**

4/11/22

No complaints, here for annual exam, minor inappropriate urination complaint. Minor tartar on exam, slab fracture 208, lipomas.

PATIENT

Jodi Pazourek

Current Medications: Sentinel monthly.

Lab Results: ALT 320 (18-121), SAP 394 (5-160), AST 68 (16-55), lymphocytes mild decrease. UA- rare rods/amorphous crystals.

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

Imaging Performed By: Rachel Brillhart, RDMS.

SPECIES

Canine

BREED

Dachshund

SEX

Female, spayed

AGE

10/22/2010

WEIGHT

18.1 lbs.

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 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 (5.31 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.

The right kidney is normal size (5.49 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.

INTERPRETED BY

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

Adrenal Glands

The left adrenal gland is upper limits of normal size (0.57 cm at cranial pole) (0.58 cm at caudal pole) (2.65 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.

HOSPITAL NAME

Essex Middle River VC

The right adrenal gland is upper limits of normal size (0.59 cm at cranial pole) (0.55 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.

REFERRING VET

Dr. Hicks

Spleen

The spleen is normal in size (1.09 cm in width at the level of the hilus) with a normal capsular contour. The parenchyma is subtly mottled in appearance. 1-2 small myelolipomas are observed in the region of the hilus. Splenic vasculature is normal.

INVOICE

13185

Liver

The liver is subjectively prominent in size with slightly swollen peripheral contours. The parenchyma is isoechoic relative to the spleen. A 2.49 x 1.79 cm irregular, hypoechoic nodule/mass is observed on the left side. The remaining parenchyma is mildly heterogeneous and mottled in appearance. 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 aggregated echogenic adhered sludge 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 is 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 is normal to mildly thickened (up to 0.49 cm) with a normal layering pattern. There is evidence of mucosal speckling and striations in some segments. Discreet masses are not identified. The colonic wall is normal. No obstructive disease is noted.

Pancreas

The pancreas is diffusely visible. In the region of the left limb, the parenchyma is hypoechoic to slightly mottled in appearance. In the region of the right limb, the parenchyma is hyperechoic relative to surrounding omental fat and slightly mottled in appearance. No distinct focal lesions are observed. The pancreatic duct is not overtly dilated.

Free Abdomen

An area of reactive mesentery is observed in the mid to caudal abdomen. Trace free fluid is observed. The abdominal lymph nodes are normal/not visible.

Other

A brief echocardiogram reveals no obvious evidence of pericardial effusion.

ULTRASONOGRAPHIC FINDINGS

Primary Findings:

- The left hepatic nodule and diffuse hepatic parenchymal changes could be consistent with a benign process (i.e., regenerative nodular hyperplasia). Alternatively, inflammatory disease, infiltrative neoplasia (i.e., round cell tumor) and copper hepatotoxicosis are also possible.
- The small intestinal mucosal changes are suggestive of a chronic enteropathy (i.e., inflammatory bowel disease, lymphangiectasia). However, correlation with clinical findings is recommended.
- Focal mid-abdominal peritonitis is present, likely secondary to bowel pathology.

Secondary Findings:

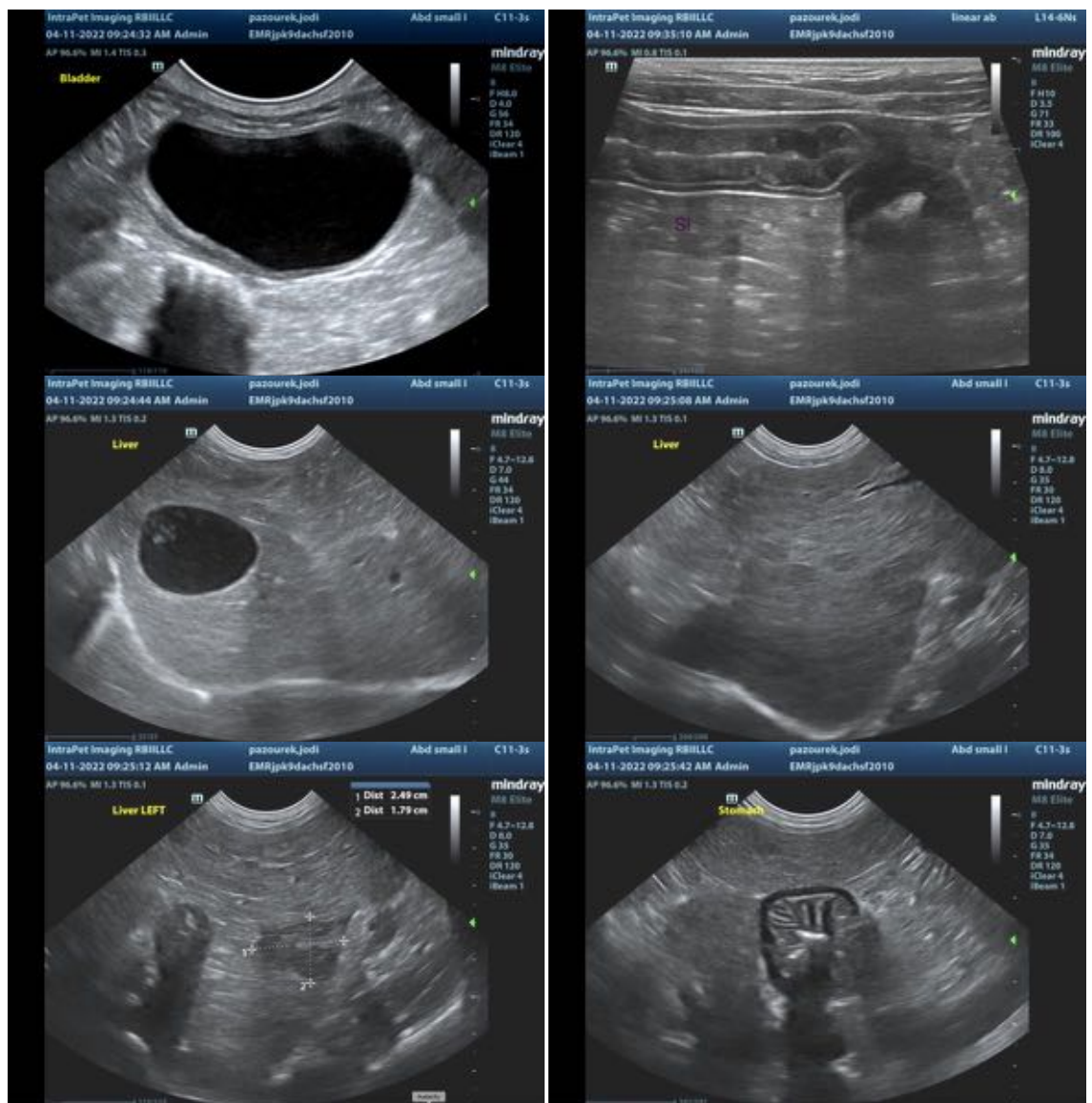
- Minor, age-related renal changes.
- Age-related pancreatic remodeling with suspected fibrosis. Low-grade pancreatitis may also be present, particularly if the patient has a positive Murphy's sign.
- The splenic parenchyma changes are most consistent with a benign process such as lymphoid hyperplasia, extramedullary hematopoiesis or splenitis with a low possibility of infiltrative neoplasia (i.e., lymphoma, mast cell neoplasia).
- Gallbladder debris/sludge, non-mucocele.

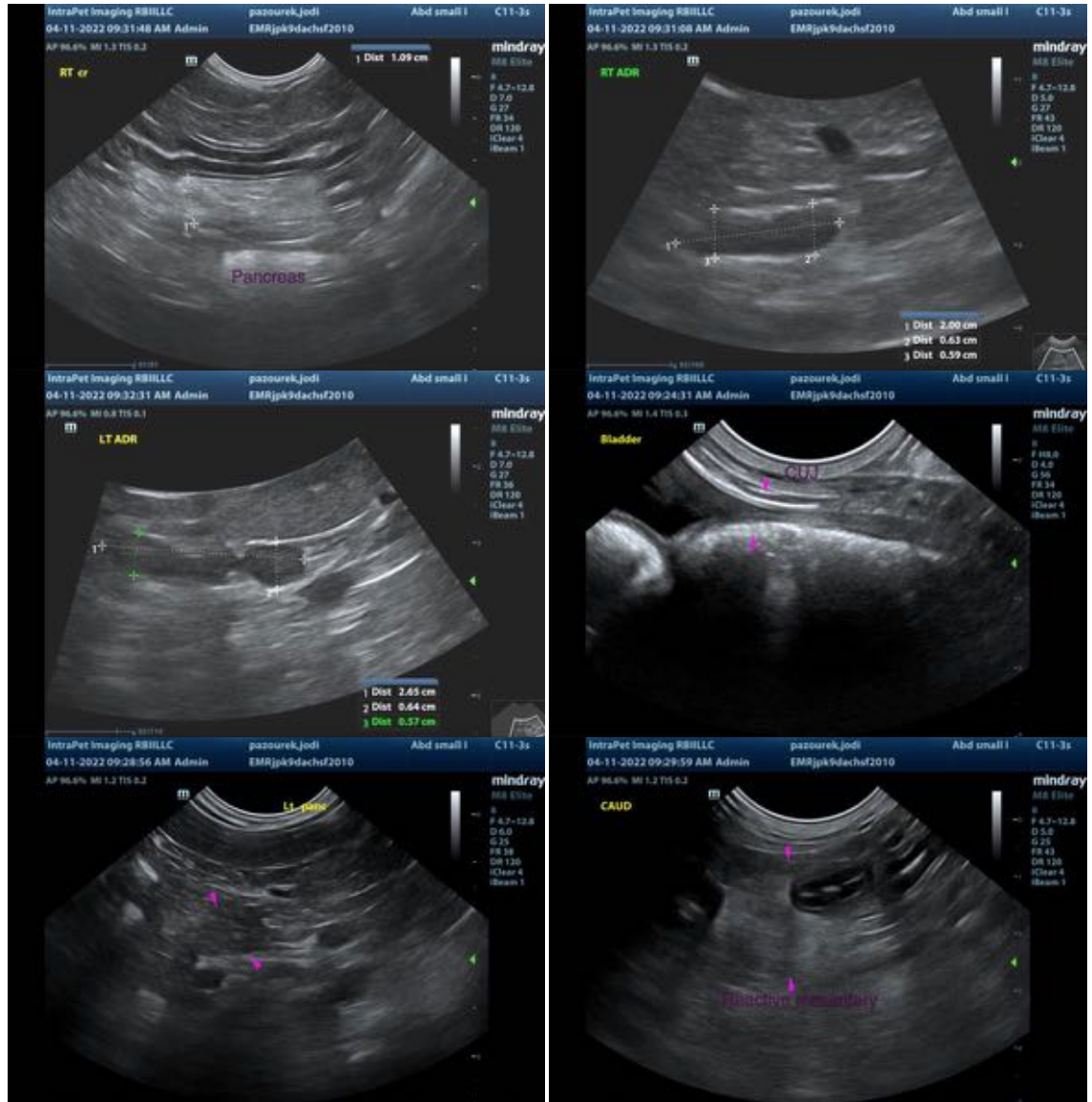
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- Given the elevated liver enzymes and hepatic parenchymal changes, consider pre- and post-prandial serum bile acids, Leptospiriosis testing (i.e., blood and urine PCR, serology) and hepatic tissue sampling (i.e., fine needle aspiration or surgical biopsy, with particular attention to the left nodule). Surgical biopsies are preferred in that they are more likely to provide a definitive diagnosis. If

surgery is pursued, aerobic and anaerobic bile cultures and additional hepatic tissue samples for potential copper quantitation should be obtained.

- If a conservative approach is desired, consider empirical treatment for bacterial cholangiohepatitis (amoxicillin-clavulanic acid +/- metronidazole with, Denamarin). If no improvement in the liver values is seen within 5-7 days of initiating therapy, antibiotics should be discontinued and hepatic tissue sampling reconsidered. If liver values improve, continue therapy for at least 4-6 weeks and 1 week beyond normalization of the liver values.





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