

**DATE PRESENTING CLINICAL SIGNS**

10/20/22

Follow up U/S to revisit remodeling issues in spleen/pancreas/L adrenal to see if any changes. Bile acids 8/22 were wnl. Texas GI panel all wnl except for low folate. Being tx with novel whitefish diet and herbs.

PATIENT

Spencer Petrosik

Current Medications: Supplements and herbs.

Lab Results: 10/20 ALT 140, AST 40, ALKP 33. 1/21 ALT 105, AST 68, ALKP 144. 5/22 ALT 340, AST 60, ALKP 145. 7/22 ALT 393, AST 45, ALKP 148. 8/22 ALT 316.

Date of Previous IntraPet Ultrasound: 8/25/2022. See attached.

SPECIES

Canine

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

BREED

Beagle

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**Urinary System**

The urinary bladder is moderately distended with anechoic contents. No masses, inflammatory changes, echogenic sediment or cystoliths are observed. The urinary bladder, trigone and visible pelvic urethra are normal in thickness with a smooth mucosal surface.

SEX

Neutered Male

Prostate is normal in size, echotexture and echogenicity for a neutered male.

AGE

5/20/11

Kidneys are overall normal in size and shape with smooth peripheral margination. A normal 1:3 cortex to medulla ratio is maintained. The medulla and cortices are uniform in texture with some mild increased cortical echogenicity and mild loss of corticomedullary distinction, expected in this age patient. There is no evidence of pyelectasia, mineral or infarcts observed. The left kidney measures 5.34 cm. The right kidney measured 5.41 cm.

WEIGHT

26.8 Pounds

INTERPRETED BYBeth Johnson, DVM
DACVIM**Adrenal Glands**

The right adrenal gland is normal in size (2.8 cm long x 0.61 cm at the cranial pole and 0.63 cm at the caudal pole), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

IMAGING PERFORMED BY

Rachel Brillhart RDMS

The left adrenal gland is normal in size (2.5 cm long x 0.66 cm at the cranial pole and 0.60 cm at the caudal pole), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal. No evidence of the previously reported left adrenal nodule.

HOSPITAL NAMEHealing Paws Vet
Wellness Center**Spleen**

Spleen is generally normal in size and shape with a smooth capsular contour. Parenchyma is diffusely nodular in appearance characterized by small discrete hypoechoic nodules. Splenic vasculature appears normal.

REFERRING VET

Dr. Levitsky

Liver

Liver is subjectively enlarged (swollen contour). Mild parenchymal remodeling with diffusely mildly coarse architecture and increased portal markings is present. In the right liver, several discrete hypoechoic nodules are noted, one measuring 2.0 cm in diameter and another measuring approximately 1.0 cm in diameter. Visible vasculature and biliary tree appear normal without distension or congestion.

INVOICE

42241

Gallbladder is moderately distended with anechoic bile as well as suspended and gravity dependent echogenic debris. The wall is smooth without visible thickening. There is no evidence of cystic or CBD dilation. There is no evidence of effusion or inflammation.

Gastrointestinal

The stomach wall is normal in thickness (canine < 0.5 cm and feline < 0.4 cm) and layering. The lumen of the stomach is empty with no evidence of obstruction, foreign material or infiltrative disease. Pyloric outflow tract appears patent.

The visible small intestines are normal in wall thickness and layering (canine duodenum < 0.5 cm and feline duodenum < 0.4 cm; other < 0.3 cm). Small intestinal motility appears adequate (1-3 contractions per min). The lumen of the small intestine is empty with no evidence of obstruction, foreign material or infiltrative disease.

The visible colon is normal in wall thickness (< 0.2 cm) and layering. Contents are consistent with normal formed feces and gas.

Pancreas

The observed pancreas appears appropriately isoechoic to surrounding omental fat. The capsule is mildly irregular in shape. Parenchyma is mildly heterogenous and coarse. There is no visible pancreatic duct dilation. There is no evidence of active peripancreatic inflammation.

Free Abdomen

There is no evidence of free peritoneal effusion noted in these images.

There is no apparent lymphadenopathy noted in these images.

PRIMARY FINDINGS

- **Hypoechoic hepatomegaly** – This appearance is consistent with an acute hepatopathy or acute cholangiohepatitis. Infiltrative neoplasia (round cell neoplasia) should also be considered.
- **Liver nodules** – Differentials for a discrete liver nodule include primarily benign changes such as nodular hyperplasia, fibrosis of an old hematoma, granuloma, etc.; however, while considered less likely, primary hepatic neoplasia, infiltrative round cell neoplasia and metastatic disease can mimic benign lesions and cannot be definitively ruled out.
- **Splenic micronodular hyperplasia pattern** – This nodular change is often associated with benign aging nodular hyperplasia. Infiltrative neoplasia, however, including both early hemangiosarcoma as well as round cell neoplasia cannot be ruled out. **This change appears relatively static to the previous ultrasound.
- **Gallbladder debris** - Cholecystic debris is of unknown clinical significance. It can be seen with biliary stasis from fasting or illness. Cholecystic debris is not necessarily related to hepatobiliary disease. Echogenic bile is most commonly an incidental finding in dogs and should be interpreted in combination with clinical signs such as nausea, inappetence, cranial abdominal discomfort and/or laboratory changes such as increased ALP and/or increased Tbili. **This change is static to slightly improved from the previous ultrasound.
- **Pancreatic age-related remodeling** – Mild irregularities are consistent with benign age-related change. Low-grade smoldering chronic pancreatitis cannot be ruled out and should be suspected in the face of appropriate clinical signs. **This change is static, no progression from prior ultrasound.

SECONDARY FINDINGS

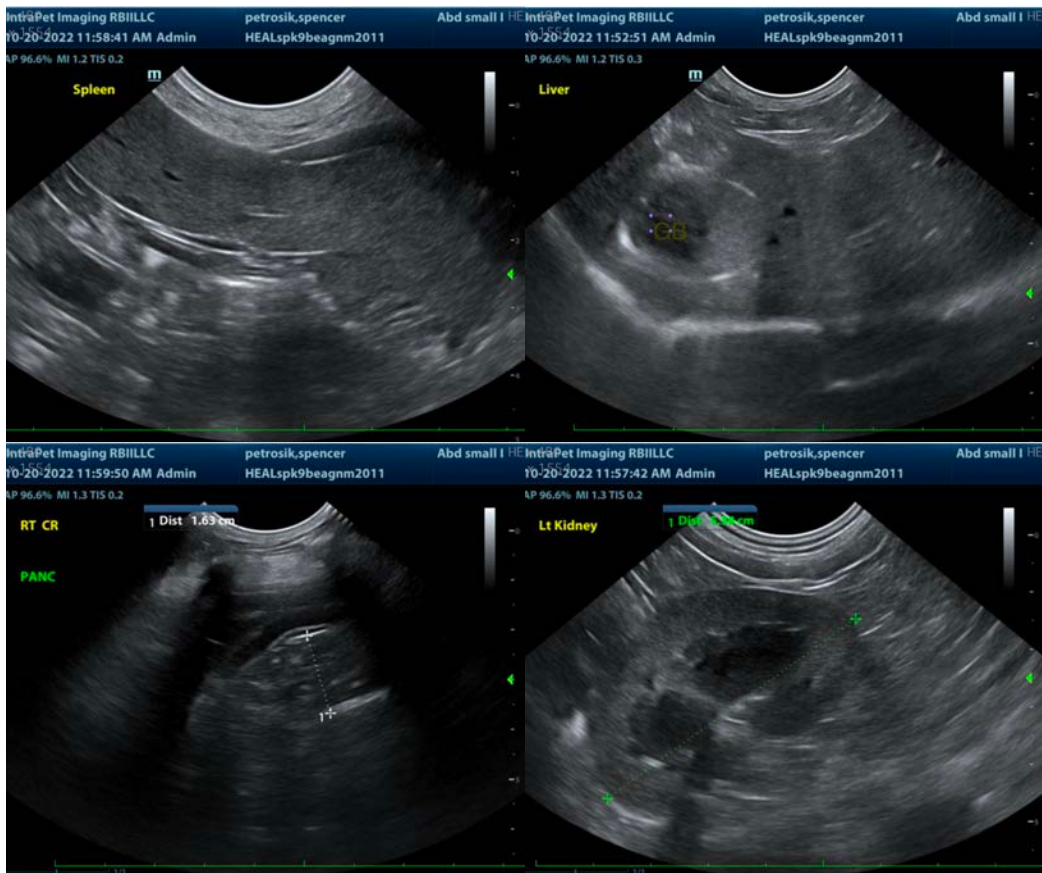
- Age related kidney changes

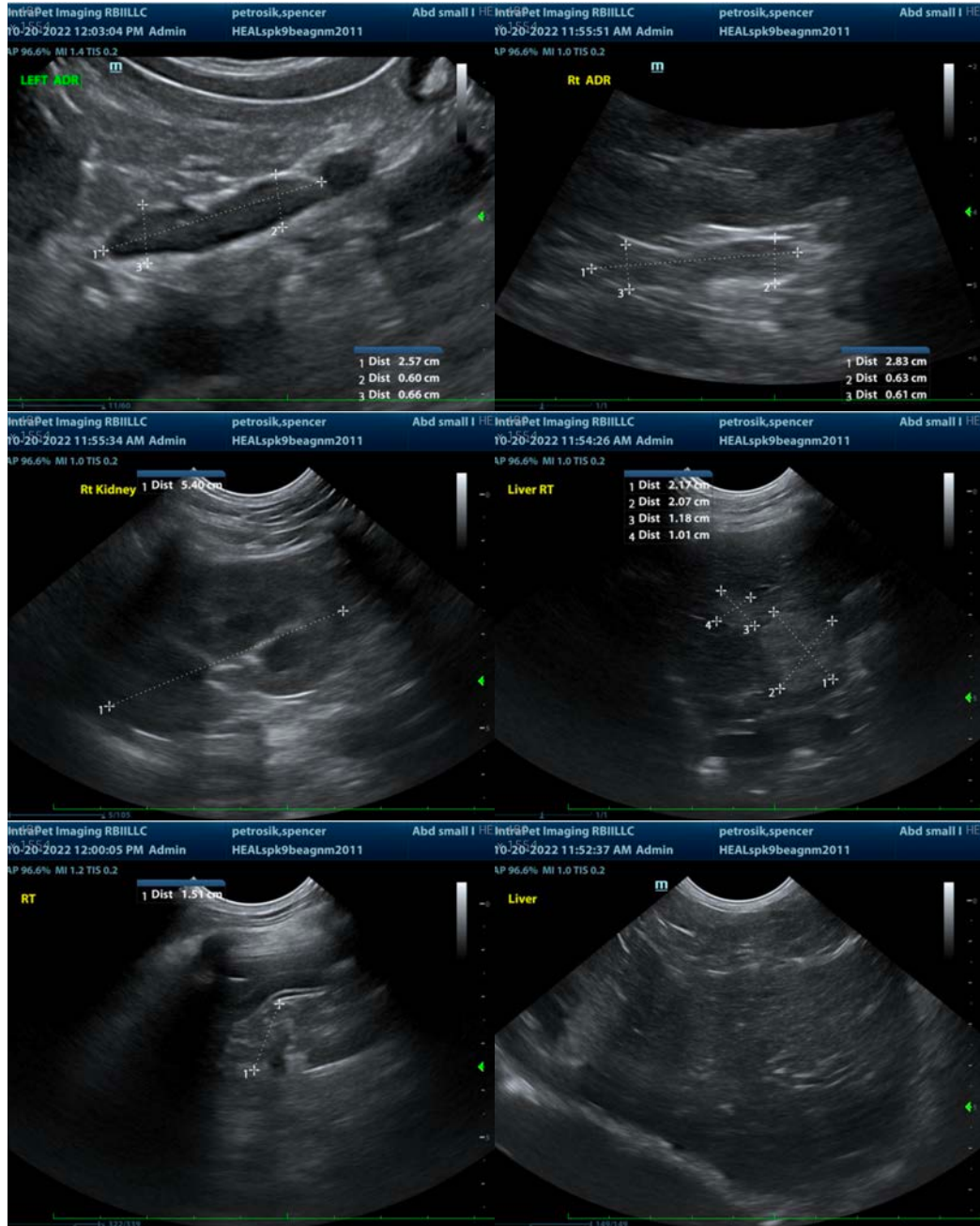
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

There is no evidence of the previously noted adrenal nodule or the previously noted bowel speckling.

Given the new development of liver nodules, a fine needle aspirate of both the diffusely hypoechoic liver parenchyma as well as the discrete hyperechoic liver nodules could be considered if patient's coagulation status is appropriate. Testing for Leptospirosis is also indicated, given the increased liver enzymes.

In the meantime, the ultrasound findings are relatively static, so if clinically doing well, empirical hepatic nutraceuticals could be considered with monitoring of liver enzymes for improvement.





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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