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DATE PRESENTING CLINICAL SIGNS

9/22/22

Presented for dental cleaning but pre anesthetic BW shows >ALT 511. Discussed with owner cancelling surgery and pursuing workup for elevated ALT.

PATIENT

Ripley Rockenstire

Current Medications: None.
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Telazol IV.
Stat Report: Not requested.

SPECIES

Canine

BREED

Labrador Retriever

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

Spayed Female

The right kidney is normal in size (6.4 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia or infarcts observed. Non-obstructive linear multifocal hyperechoic diverticular foci with acoustic shadowing are noted.

AGE

6/1/11

The left kidney is normal in size (6.62 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia or infarcts observed. Non-obstructive linear multifocal hyperechoic diverticular foci with acoustic shadowing are noted.

WEIGHT

68.5 Pounds

Adrenal Glands

Adrenal glands are largely normal in size, shape and contour. Some parenchymal heterogeneity is present without concerning capsular distortion. These changes are likely normal for this age but should be monitored if there is any suspicion of adrenal disease. The left adrenal gland measures 3.3 cm long x 0.90 cm at the cranial pole and 0.68 cm at the caudal pole. The right adrenal gland measures 2.5 cm long x 1.5 cm at the cranial pole and 0.77 cm at the caudal pole. A hyperechoic nodule is noted in the cranial pole of both adrenal glands. The nodules do not disrupt normal shape and/or architecture.

INTERPRETED BY

Kathleen Sennello DVM,
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(Small Animal Internal
Medicine)

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Stephanie Warga
RDMS, RVT

Spleen

The spleen is subjectively normal in size with a normal smooth capsular contour. Parenchyma is appropriately finely textured and homogenous with normal echogenicity relative to surrounding tissue (hyperechoic to liver). A 1.6 cm x 1.8 cm homogeneous isoechoic mass is noted off the tail of the spleen that results in a capsular bulge. Splenic vasculature appears normal.

HOSPITAL NAME

Alexander AH

Liver

Liver is subjectively enlarged with mildly irregular margins. Parenchyma is heterogenous characterized by multiple poorly defined hypoechoic nodules within otherwise hyperechoic liver parenchyma. Visible vasculature and biliary tree appear normal without distension or congestion.

REFERRING VET

Dr. Alexander

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.

INVOICE

41558

Gastrointestinal

Urinary bladder is mildly fluid distended. Visible contents are anechoic. Urinary bladder wall is unable to be fully assessed for pathology without further distension. No visible masses or cystoliths are observed. The trigone and visible pelvic urethra are normal thickness with a smooth mucosal surface. If there are urinary signs and/or concern for urinary bladder pathology, reassessment after complete filling is recommended.

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 pancreatic parenchyma is appropriately isoechoic to surrounding tissue. Visible capsule is smooth and normal in contour. There is no visible pancreatic duct dilation. There is no evidence of active peripancreatic inflammation.

Free Abdomen

Some echogenic hyperechoic fat and mesentery is noted in the mid abdomen around the root of the mesentery. No visible pericardial effusion noted in these images.

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

There is no apparent lymphadenopathy noted in these images.

PRIMARY FINDINGS

- **Hypoechoic splenic nodule/mass** – likely represents a benign lesion such as a hematoma, nodular hyperplasia, extramedullary hematopoiesis, etc., however while considered less likely, infiltrative neoplasia can mimic benign lesions, and cannot be ruled out.
- **Bilateral hyperechoic adrenal nodules** – Differentials include primary adrenal cortical adenoma or adenocarcinoma, pheochromocytoma, myelolipoma, adrenal hyperplasia secondary to pituitary disease or metastatic disease. Ultrasound alone cannot differentiate between functional and non-functional nodules and/or between benign and malignant disease. Small nodules without other evidence of abdominal disease (to suggest metastatic disease) and/or clinical signs (to suggest adrenal disease) are most often incidental and should be monitored.
- **Heterogenous Liver** – These changes are most consistent with benign processes such as nodular hyperplasia, steroid (vacuolar) hepatopathy, extramedullary hematopoiesis or possibly chronic inflammatory disease and less commonly infiltrative round cell or metastatic neoplasia.
- **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.
- **Enhanced hyperechoic tissue around the root of the mesentery** – suggestive of focal inflammation of unknown origin, potentially secondary to mild or resolving gastroenteritis or potentially mild pancreatitis versus other.

SECONDARY FINDINGS

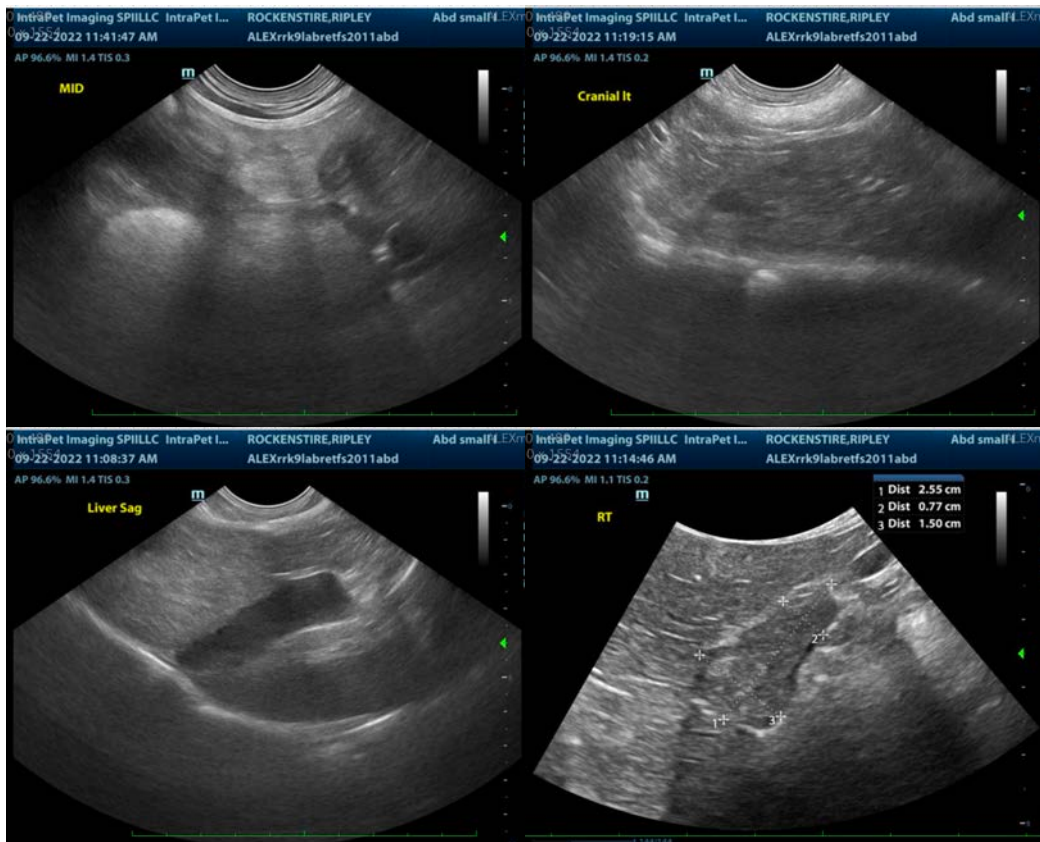
- Non-obstructive dystrophic mineralization bilaterally in the kidneys

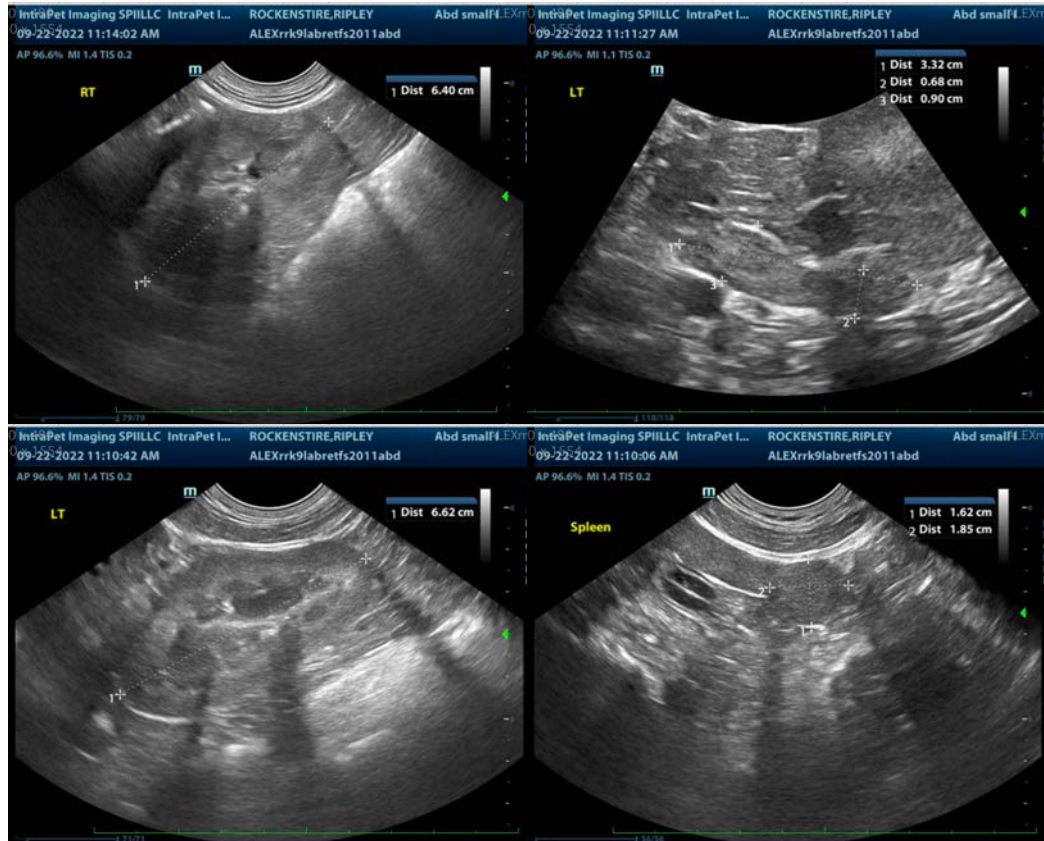
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Given this patient's reported ALT increase, testing for Leptospirosis is indicated if not recently evaluated.

Fine needle aspirates of the liver and an attempted fine needle aspirate of the spleen were already reportedly performed, and recommendations include submission of samples for cytology. Given the lack of ability to aspirate the spleen, close monitoring of the nodule for progression is recommended with a recheck ultrasound in 4-8 weeks.

Given the mesentery changes, empirical deworming with a 5-day course of Panacur is recommended. If gastrointestinal signs are present including weight loss, intermittent diarrhea, etc., a gastrointestinal panel including TLI, PLI, folate and cobalamin to Texas A&M GI laboratory could be considered. Otherwise, this is likely an incidental, clinically insignificant finding unless clinical signs develop.





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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