IMAGING PERFORMED BY

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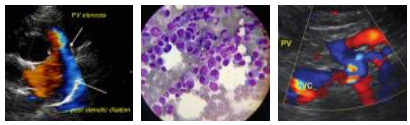

SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
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DATE
05/27/2022

PATIENT
Boo Bolich

SPECIES
Canine

BREED
Boston Terrier

SEX
FS

AGE
13 yr

WEIGHT
31.4 lb

INTERPRETED BY
Kathleen Sennello DVM, MS, Diplomate ACVIM (Small Animal Internal Medicine)

HOSPITAL NAME
Greenbrier Veterinary Clinic

REFERRING VET
Dr. Streett

INVOICE
10686ag

PRESENTING CLINICAL SIGNS

Hx of inappetence for 1 week. no other symptoms. PE mostly unremarkable except for back pain on exam, stage 3 dental disease but no obvious major abnormalities to explain inappetence. cranial organomegaly, non-painful on abdominal palpation. Labwork revealed elevated ALP=1965, BUN=55. all else WNL. urinalysis pending.

Current Medications: Entyce, cerenia for 4 days with no change.

Started on 5/24 on rimadyl, methocarbamol, gabapentin to see if responds to therapy for back pain/possible IVDD.

Radiographs: See attached.

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested

Imaging Performed By: Andi Parkinson, BS, RDMS.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder is moderately distended with anechoic urine. The Bladder wall, trigone, ureteral papillae and visible urethra (to a depth of 2cm) appear normal with no evidence of wall thickening, mucosal irregularities, masses or cystic calculi.

The left kidney has a normal shape and size. Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal. The left kidney measured 4.87 cm in length.

The right kidney has a normal shape and size. Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal. The right kidney measured 5.28 cm in length.

Adrenal Glands

The left adrenal gland is normal/borderline enlarged in size measuring 0.8 cm at the caudal pole. It is observed in its normal position cranial to the left renal artery. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

The right adrenal gland is normal/borderline enlarged in size measuring 0.7 cm at the caudal pole. It is observed in its normal position between the cranial aspect of the right kidney and the caudal vena cava. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

Spleen

The spleen is subjectively normal in size, echotexture is homogenous, and the splenic capsule is slightly irregular. The blood flow through the hilus and splenic parenchyma appears normal. There is an isoechoic solid mass effect visualized measuring 3.36 cm x 2.62 cm. This lesion mildly deviates the splenic capsule.

Liver

The liver is subjectively normal in size, and echogenicity with smooth peripheral margins. The parenchyma is heterogenous in echotexture with subtle, indistinct focal mottling. The visible portions of the vasculature and biliary tract appear normal. There is a 1.94 cm x 1.27 cm hyperechoic nodule visualized within the parenchyma.

The gall bladder lumen is moderately distended. The wall of the gall bladder is not thickened and has a smooth mucosal surface. There is a moderate amount of non-organized echogenic debris. The cystic and common bile ducts are normal/not visible.

Gastrointestinal

The stomach contains minimal luminal contents. It measures at a normal thickness of <0.7cm with some variability due to the presence of rugal folds. The distinction of the gastric wall layers is adequate and there is no impression of reduced peristaltic activity. No masses or focal lesions were observed.

The visualized areas of duodenum, jejunum and ileum have a relatively uniform diameter with minimal fluid distension. Wall thickness is normal. Bowel loops follow a curvilinear path with distinct wall layering maintaining the typical 1:3 muscularis:mucosa layer ratio. The duodenum measured as normal (between 0.3-0.5cm in wall thickness) and the jejunum measured as normal (between 0.2-0.47cm.) Visualized peristalsis appears appropriate. There were no focal lesions consistent with obstruction or a mass effect observed.

The ileocecal junction was visualized and exhibited normal intact wall layering and is subjectively of normal thickness. Sections of colon are visualized with formed fecal material and gas shadowing distally. There is no observed focal or generalized colon wall thickening or loss of layering.

Pancreas

The pancreas is normal and isoechoic to surrounding mesentery. There is no evidence of nodules or cystic lesions. There is no evidence of regional mesenteric inflammation or fluid.

Free Abdomen

Evaluation of the peritoneal cavity did not reveal any evidence of effusion. There is a slightly prominent portal lymph node visualized measuring 1.09 cm x 2.23 cm. The Medial iliac nodes appear normal and there was no evidence of a caudal aortic thrombus at the bifurcation. The omentum is of normal uniform echogenicity.

ULTRASONOGRAPHIC FINDINGS

- Isoechoic solid splenic mass effect. This lesion is isoechoic and nonactivated which trend toward more benign nature but underlying neoplastic process cannot be ruled out. Recommend FNA or splenectomy.

- Mildly heterogeneous liver with hyperechoic nodule. The diffuse hepatic changes are non-specific and could be consistent with vacuolar hepatopathy, nodular hyperplasia, inflammatory/immune-mediated disease, fibrosis, extramedullary hematopoiesis, toxic hepatopathy (e.g., copper), infiltrative neoplasia (less likely) or other hepatopathy. This intraparenchymal lesion does not deviate the architecture and trends towards a benign appearance although an underlying neoplastic process cannot be excluded. Recommend continued monitoring.

- Moderate gallbladder debris. The significance of the aggregated gallbladder debris is unclear. This could represent an early mucocele, cholestasis, or may be secondary to fasting.

- Prominent portal lymph node. The prominent abdominal lymph nodes are most consistent with reactive lymphadenitis or lymphoid hyperplasia. Neoplastic infiltration is considered less likely.

- Borderline bilateral adrenomegaly. The bilateral adrenomegaly could be consistent with bilateral hyperplasia (e.g., secondary to pituitary-dependent hyperadrenocorticism), bilateral infiltrative neoplasia, inflammatory adrenal disease, other. Correlation with clinical findings is recommended. These adrenals are not overtly enlarged but are hypoechoic and somewhat prominent.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

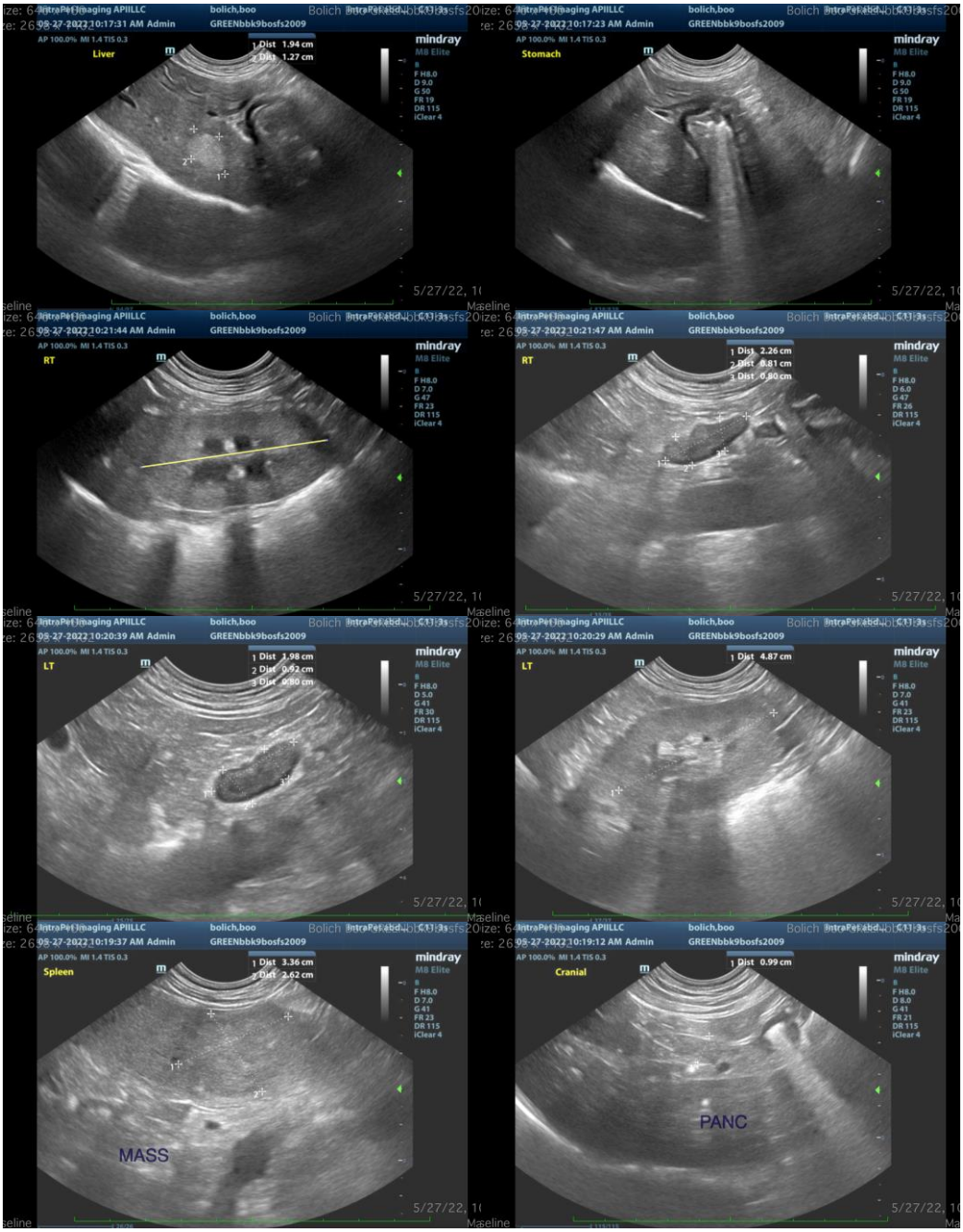
An obvious cause for the current reduction in appetite is not visualized in this study. There is an isoechoic splenic mass and a small nodule in the liver. Neither of these lesions appear to have surrounding inflammatory mesentery etc. so it is possible that these are incidental findings at this time, or the splenic lesion could be causing more discomfort than can be appreciated sonographically.

Clinically consider the possibility of other causes of for the decreased appetite such as acute gastroenteritis, pancreatitis not evident in today's scan etc. If this is considered likely consider a GI panel to Texas A&M with PLI/TLI/Cobalamin and Folate to further evaluate the pancreas and small intestine. Supportive therapy for acute gastroenteritis/pancreatitis is recommended. If the symptoms appear more consistent with the splenic lesion (and not true back pain) then splenectomy with histopathology. If surgery is elected, closely evaluate the liver and small intestine and consider obtaining biopsies of both areas.

There is a small nodule visualized within the liver. I suspect this lesion is too deep to sample and it has a somewhat benign appearance. Recommend continued monitoring. I do not suspect this as a cause for the ALP elevation reported. Both adrenals are hypoechoic and somewhat "plump" but not overtly enlarged. This could be emerging Cushing's disease or some other hepatopathy.

- Consider pre and post prandial bile acids to evaluate liver function
- Consider a FNA of the liver
- Consider adrenal function testing if appropriate. Obviously, the anorexia reported is not consistent with Cushing's. I do not recommend testing for adrenal dependent disease if this patient is feeling sick.

Consider three view thoracic radiographs to rule out concurrent thoracic disease/involvement.


IntraPet Imaging APIILLC
bolich,boo
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AP 100.0% MI 1.4 TIS 0.3
Liver
1 Dist 1.94 cm
2 Dist 1.27 cm
mindray
M8 Elite
IntraPet Imaging APIILLC
bolich,boo
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Stomach
mindray
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RT
mindray
M8 Elite
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RT
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3 Dist 0.80 cm
mindray
M8 Elite
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mindray
M8 Elite
IntraPet Imaging APIILLC
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LT
1 Dist 4.87 cm
mindray
M8 Elite
IntraPet Imaging APIILLC
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05-27-2022 10:19:37 AM Admin
GREENbbk9bosfs2009
AP 100.0% MI 1.4 TIS 0.3
Spleen
1 Dist 3.36 cm
2 Dist 2.62 cm
mindray
M8 Elite
MASS
IntraPet Imaging APIILLC
bolich,boo
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GREENbbk9bosfs2009
AP 100.0% MI 1.4 TIS 0.3
Cranial
1 Dist 0.99 cm
mindray
M8 Elite
PANC

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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kathleen.sennello@sonopath.com