

PATIENT

PRESENTING CLINICAL SIGNS

Boomer Williams

History: ADR- history of elevated liver enzymes (ALT, ALP, GGT and T. Bili), icterus, inappetence P was initially treated for elevated liver enzymes in October of 2022- did well with medication but was still icteric. Presented in February for inappetence and lethargy.

SPECIES

Canine

Abnormal PE/Chem/CBC/UA Results: Lepto ELISA test negative in October. Liver values were improved but still elevated, CBC showed moderate anemia (HCT 26%) and was positive on serology for anaplasma. Was sent home with doxycycline while anaplasma PCR was sent off. Also started on prednisolone for suspect secondary IMHA. P has been doing well since that appointment. Anaplasma PCR was negative so doxy was discontinued. P doing well at home and is starting taper of the steroid. Still icteric. Abdominocentesis at time of scan= clear, slightly yellow tinged fluid.

BREED

Cockapoo

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

SEX

Urinary System

Male, neutered

The urinary bladder is mildly to moderately distended. The wall is of appropriate thickness for the level of repletion. A 0.87 cm cystic calculus is observed within the lumen along with a small amount of echogenic to mineralized debris. The region of the trigone and the visible portion of the proximal urethra are normal.

AGE

4 Yrs.

The prostate is normal in size (1.01 cm in width) and shape. Parenchyma is homogenous. The prostatic urethra appears normal without evidence of dilation or obstruction.

WEIGHT

16 lbs.

The left kidney is normal in size (6.04 cm in length) with a normal shape, smooth peripheral margins and normal internal architecture. There is normal corticomedullary distinction. Several hyperechoic shadowing diverticular foci are observed. There is no evidence of pyelectasia, infarcts or hydronephrosis.

INTERPRETED BY

The right kidney is normal size (5.92 cm in length) with a normal shape, smooth peripheral margins and normal internal architecture. There is normal corticomedullary distinction. Several hyperechoic shadowing diverticular foci are observed. Trace pyelectasia is present. There is no evidence of infarcts or hydronephrosis.

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

Adrenal Glands

**IMAGING
PERFORMED BY
Sara Pender**

The left adrenal gland is normal size (0.31 cm at cranial pole) (0.40 cm at caudal pole) (1.52 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

SVS Imaging

The right adrenal gland is normal size (0.35 cm at cranial pole) (0.32 cm at caudal pole) (1.51 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

Spleen

Dr. Hartman

The spleen is normal in size (1.17 cm in width at the level of the hilus) with a normal capsular contour. There is appropriate echogenicity and echotexture. A 0.5 cm hypoechoic nodule is observed at the lateral aspect. Splenic vasculature is normal.

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Liver

The liver is subjectively enlarged with swollen/irregular peripheral contours. The parenchyma is isoechoic relative to the spleen and mildly heterogeneous in appearance. No distinct focal lesions are

DATE

2/14/23



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observed. Vascular and biliary tracts are of normal volume with no evidence of congestion. The gall bladder lumen is mildly distended with mostly anechoic contents. The wall is normal to slightly thickened (up to 0.30 cm). The cystic and common bile ducts are normal/not seen.

SPECIES

Canine

Gastrointestinal

The stomach and intestine are free of stasis and exhibit normal peristaltic activity. The gastric lumen is mildly to moderately distended with ingesta. The gastric wall and pylorus are 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 thickness is normal with a normal layering pattern and appropriate mural detail. Discreet masses are not identified. The colonic wall is normal. No obstructive disease is noted.

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Pancreas

The pancreas is visible with normal curvilinear peripheral contours. The parenchyma is mildly hypoechoic relative to surrounding omental fat and slightly mottled in appearance. The pancreatic duct is visible but not overtly dilated. There is no evidence of peripancreatic inflammation or effusion.

SEX

Male, neutered

AGE

4 Yrs.

Free Abdomen

A moderate amount of anechoic free fluid is present. The mesentery throughout the abdomen is hyperechoic. The abdominal lymph nodes are normal/not visible.

WEIGHT

16 lbs.

Other

A brief echocardiogram reveals no evidence of pericardial effusion or obvious right atrial/auricular mass.

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ULTRASONOGRAPHIC FINDINGS

Primary Findings:

- The hepatic parenchymal changes could be consistent with infiltrative neoplasia (i.e., round cell tumor), an inflammatory process, hepatotoxicity (i.e., copper), or other hepatopathy.
- The gallbladder wall changes may be artifactual due to lack of full repletion or may be secondary to an inflammatory process (i.e., cholecystitis).
- The diffuse ascites is likely secondary to underlying hepatic disease.
- Cystic calculus with urinary bladder debris/sand.

Secondary Findings:

- Bilateral, non-obstructive nephrolithiasis.
- The pancreatic changes could be consistent with mild pancreatitis, pancreatic edema, previous episode of pancreatitis, parenchymal remodeling, other.
- The hypoechoic splenic nodule trends toward the benign (i.e., focus of lymphoid hyperplasia or similar). Alternatively, an emerging tumor or metastatic lesion is possible.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- Three-view thoracic radiographs are recommended to assess for pulmonary metastases.
- A fine needle aspirate of the liver is recommended, if clotting status is appropriate. A 25-gauge needle should be used. If cytology results are inconclusive, laparoscopic or surgical liver biopsies may be necessary to get a definitive diagnosis.
- The abdominal fluid can also be submitted for cytologic evaluation.

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· Also consider a cPLI to further evaluate for pancreatitis.
While awaiting test results, symptomatic care is recommended.

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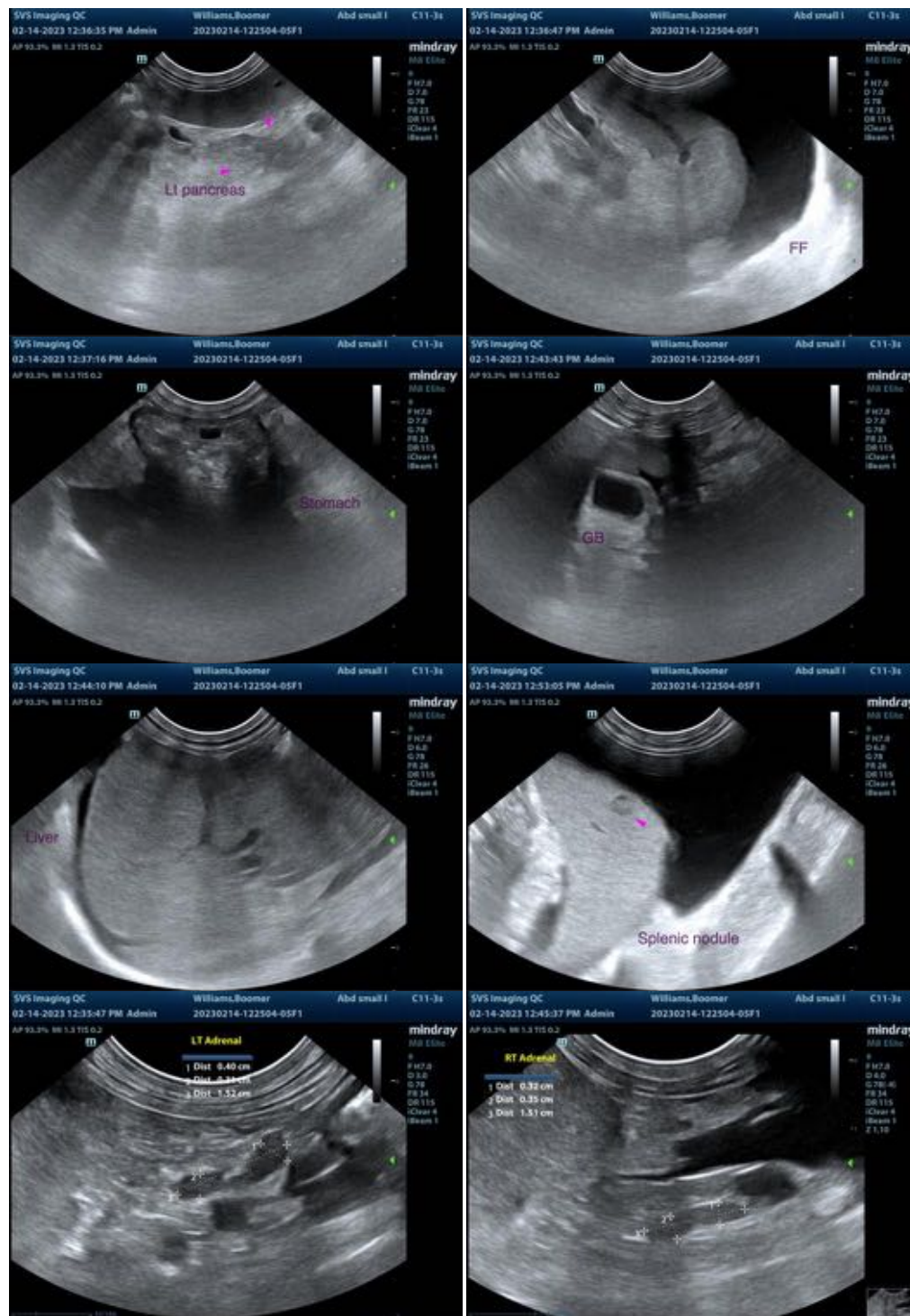
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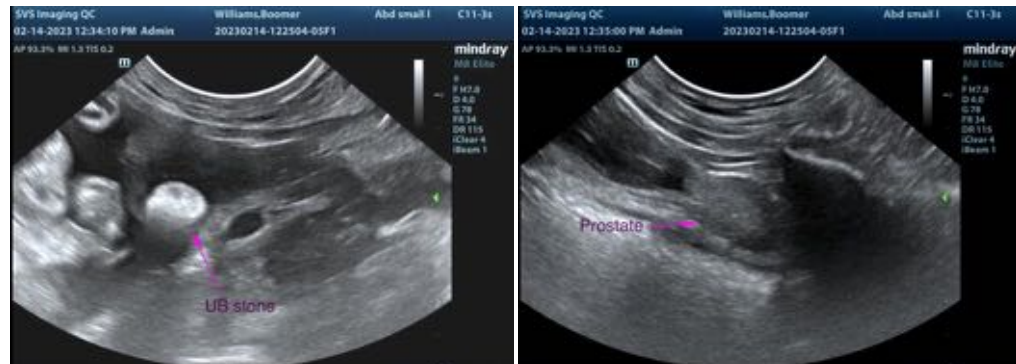
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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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