



PATIENT

Max Harding

SPECIES

Canine

BREED

Shih tzu cross

SEX

Male, neutered

AGE

14 yrs.

WEIGHT

7.7 mg.

INTERPRETED BY

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

**IMAGING
PERFORMED BY**

Dr. Brian Barnes

HOSPITAL NAME

Westview VH

REFERRING VET

Dr. Brian Barnes

INVOICE

13171

DATE

4/11/22

PRESENTING CLINICAL SIGNS

History: Started vomiting and anorexia 2 days ago. Dog is dehydrated. normal temp Is in IVF, Antibiotics, cerenia and improving. AUS screen
Abnormal PE/Chem/CBC/UA Results: ALT 3093 (N 10-125), ALKP>2000 (N 23-212), GGT 46 (N 0-11), Cho;l 10.19 (N 2.84-8.26), Snap cPI Normal

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder and visible portion of the pelvic urethra are normal for the degree of luminal distension. The urine is anechoic with no evidence of debris. Cystic calculi and discrete masses are not observed. The region of the trigone and the visible portion of the proximal urethra are normal.

The prostate is normal in size (0.68 cm in width) and shape. Parenchyma is homogenous. The prostatic urethra appears normal without evidence of dilation or obstruction.

The left kidney is normal in size (4.55 cm in length) with a normal shape, smooth peripheral margins and normal internal architecture. There is moderate loss of corticomedullary distinction. Several hyperechoic shadowing diverticular foci are observed. There is no evidence of pyelectasia, infarcts or hydronephrosis. Renal vasculature is normal.

The right kidney is normal size (4.71 cm in length) with a normal shape, smooth peripheral margins and normal internal architecture. There is moderate loss of corticomedullary distinction. Several hyperechoic shadowing diverticular foci are observed. A few small non-obstructive nephroliths are visualized. There is no evidence of pyelectasia, infarcts or hydroureter. Renal vasculature is normal.

Adrenal Glands

The left adrenal gland is normal size (0.56 cm at cranial pole) (0.48 cm at caudal pole) (1.53 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.

The right adrenal gland is upper limits of normal size (0.65 cm at cranial pole) (0.65 cm at caudal pole) (2.47 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.

Spleen

The spleen is normal in size (0.93 cm in width at the level of the hilus) with a normal capsular contour. There is appropriate echogenicity and echotexture. A 0.78 x 0.47 cm hypoechoic nodule is observed at the caudomedial aspect. Splenic vasculature is normal.

Liver

The liver is subjectively normal in size with normal contours and structure. The parenchyma is hypoechoic relative to the spleen and homogeneous in appearance. No distinct focal lesions are observed. There is an increase in portal markings. Vascular is of normal volume with no evidence of congestion. The gall bladder lumen is moderately distended. The wall is thickened (up to 0.26 cm),



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hyperechoic and irregular. A moderate amount of aggregated echogenic, partially dependent to suspended sludge in a partially stellate pattern is observed within the lumen. The cystic and common bile ducts are normal/not seen. The mesentery surrounding the gallbladder is hyperechoic.

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Gastrointestinal

The stomach and intestine are free of stasis and exhibit normal peristaltic activity. The gastric lumen is not distended. 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

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The region of the pancreas is isoechoic relative to surrounding omental fat. No obvious parenchymal abnormalities are observed. There is no evidence of regional inflammation or effusion.

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Free Abdomen

There is no obvious evidence of free fluid. The abdominal lymph nodes are normal/not visible.

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ULTRASONOGRAPHIC FINDINGS

Primary Findings:

- The gallbladder changes are suggestive of a mucocele with cholecystitis. Regional peritonitis is present. Although there is no obvious evidence of rupture, impending rupture or prior rupture with adhered mesentery over the rupture site cannot be completely excluded.
- The liver changes are most consistent with an inflammatory hepatopathy (i.e., bacterial cholangiohepatitis, chronic active hepatitis).

Secondary Findings:

- The hypoechoic splenic nodule could be consistent with a focus of lymphoid hyperplasia, extramedullary hematopoiesis, inflammation or an emerging tumor.
- Bilateral chronic renal changes with dystrophic mineralization.

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INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- Ideally, a cholecystectomy with submission of the gallbladder as well as a liver tissue samples for histopathology would be performed along with aerobic and anaerobic bile cultures. Prior to surgery, thoracic radiographs and clotting times should be assessed.
- If surgery is not to be pursued at this time, aggressive supportive care for cholecystitis/cholangiohepatitis is recommended including broad-spectrum antibiotics, Ursodiol, fluid therapy, gastric protectants, antiemetics and pain medication as needed. If this approach is taken, the gallbladder should be closely monitored sonographically for evidence of rupture.

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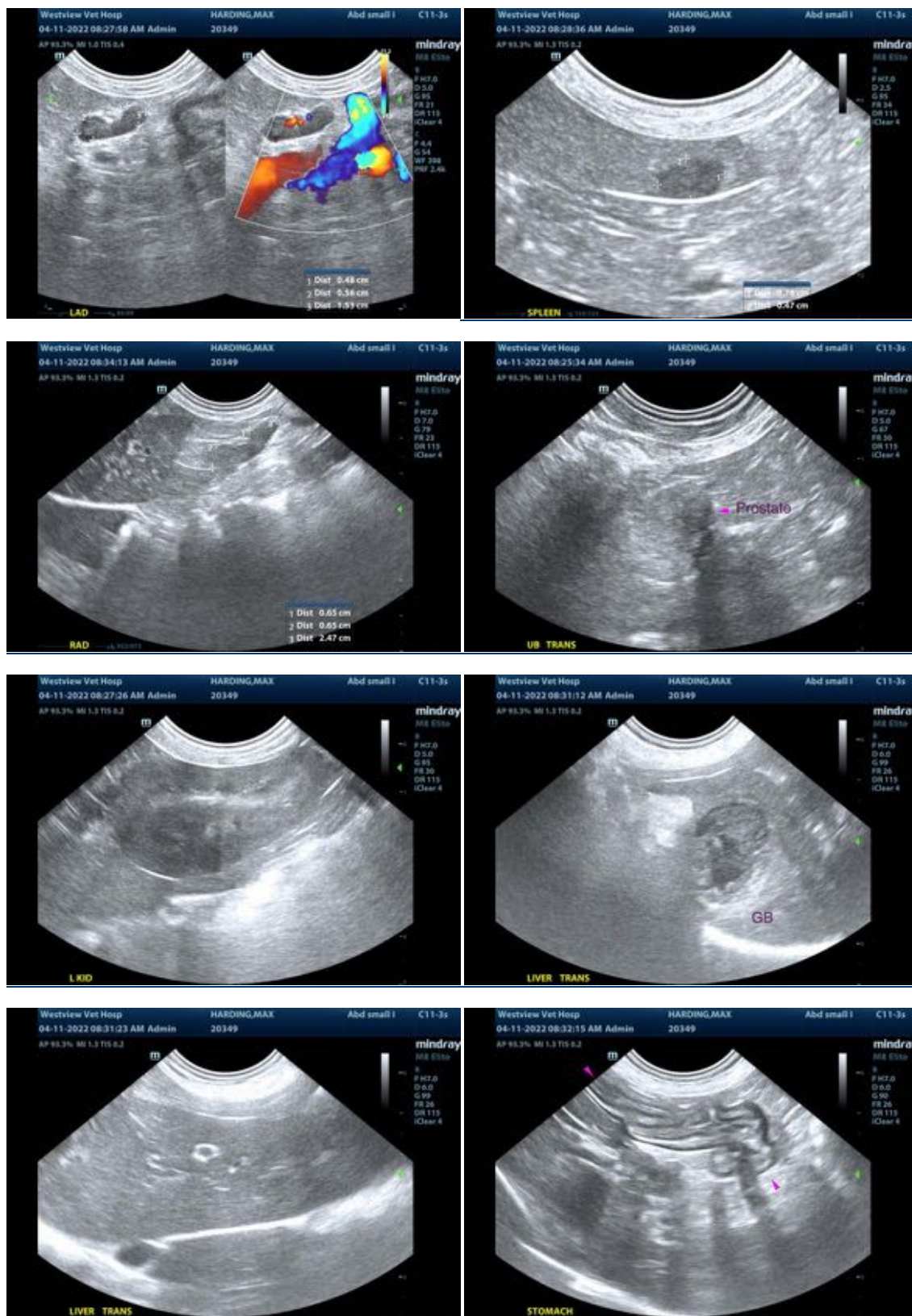
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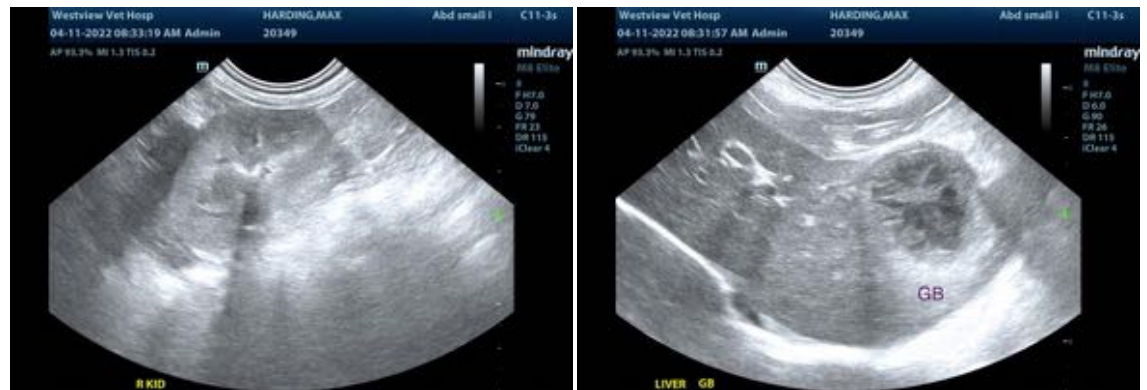
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

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

Andrea.nicastro@sonopath.com