



PATIENT PRESENTING CLINICAL SIGNS

Milo Hermiz History: elevated liver values, enlarged abdomen, requires surgery barring any major issues seen in scan

SPECIES Abnormal PE/Chem/CBC/UA Results: please see attached BW and UA
Urine Specific Gravity is 1023. Mild proteinuria. Inactive urine sediment. Unremarkable CBC. SDMA is mildly elevated. AlkP 1922. ALT 762. GGt is 47. Normal to borderline low T4.

Canine

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

BREED *Urinary System*

Shih Tzu X The urinary bladder, trigone, and pelvic urethra are normal in thickness and the mucosal surface is smooth. The bladder lumen is moderately distended with mostly anechoic urine. No masses, inflammatory changes or calculi are observed. Ureteral papillae and visualized portion of the proximal urethra, visible to a depth of 2 cm, are normal.

SEX

Neutered Male The prostate is normal in size (0.93 cm in width) and shape. Parenchyma is homogenous. The prostatic urethra appears normal without evidence of dilation or obstruction.

AGE

7 Years The left kidney is normal size (5.20 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal to mild loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

WEIGHT

28 Lbs. The right kidney is normal size (5.57 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal to mild loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

INTERPRETED BY

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

Adrenal Glands

The left adrenal gland is mildly enlarged (0.84 cm at cranial pole) (0.78 cm at caudal pole) (2.17 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.

IMAGING PERFORMED BY

Kelly Reschny

The right adrenal gland is mildly enlarged (1.65 cm at cranial pole) (0.96 cm at caudal pole) (2.73 cm in length); with a slightly irregular shape. A 0.94 x 0.62 irregular hyperechoic nodule is observed at the cranial pole. The parenchyma in the mid to caudal aspect is slightly heterogenous with some loss of glandular detail. The phrenicoabdominal vein and surrounding vasculature are normal.

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Spleen

The spleen is normal in size (0.87 cm in width at the level of the hilus) with a normal capsular contour. There is appropriate echogenicity and echotexture. No focal lesions are observed. Splenic vasculature is normal.

REFERRING VET

Dr. Aziz

Liver

The liver is subjectively enlarged with swollen peripheral contours. The parenchyma is isoechoic relative to the spleen, and homogenous in appearance. No focal lesions are observed. Hepatic vasculature and intrahepatic biliary tracts are of normal volume with no evidence of congestion.

INVOICE

10066

The gall bladder is of normal contours and contains some dependent echogenic debris. The wall is normal in thickness. No choleliths are observed. The cystic and common bile ducts are normal/not seen.

DATE

12/22/21



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Shih Tzu X

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Gastrointestinal

The gastric lumen is 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 segmentally dilated with chyme. 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 or overt infiltrative disease is noted.

Pancreas

A portion of the pancreas is obscured by the gastric distention. In the visible portion of the left limb, the pancreas is visible/prominent, with no deviation from normal peripheral contours. The parenchyma is hyperechoic relative to surrounding omental fat and slightly mottled in appearance. No distinct focal lesions are observed. The pancreatic duct is not overtly dilated.

Free Abdomen

The peritoneal cavity is normal. There is no evidence of inflammation or effusion. The abdominal lymph nodes are normal/not visible.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- Non-specific diffuse hepatopathy. Differentials include, inflammatory/immune-mediated disease, hepatotoxicosis (i.e., copper), infiltrative neoplasia (unlikely), other hepatopathy, +/- concurrent benign age-related change (i.e., vacuolar hepatopathy, regenerative nodular hyperplasia).
- Bilateral adrenomegaly. The right adrenal nodule could be consistent with a benign nodular hyperplasia or and emerging tumor.

Secondary Findings

- Minor non-specific age-related renal changes
- Age-related pancreatic remodeling with fibrosis +/- concurrent inflammation. Correlation with the patient's clinical findings is recommended.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- Regarding the elevated liver enzymes, consider the following:
 1. Pre- and post-prandial serum bile acids
 2. Fine-needle aspirate of the liver if clotting status is appropriate. If cytology results are inconclusive and aggressive approach is desired, a surgical liver biopsy with aerobic and anaerobic bile cultures, and acquisition of additional hepatic tissue samples for potential copper quantitation can be considered.
- Consider testing for hyperadrenocorticism with a low-dose dexamethasone suppression test or ACTH stimulation test if clinical signs (i.e., PU/PD) are present or develop in the future.
- Given the proteinuria, a UPC is recommended.
- Given the bilateral adrenomegaly, consider a baseline blood pressure measurement.



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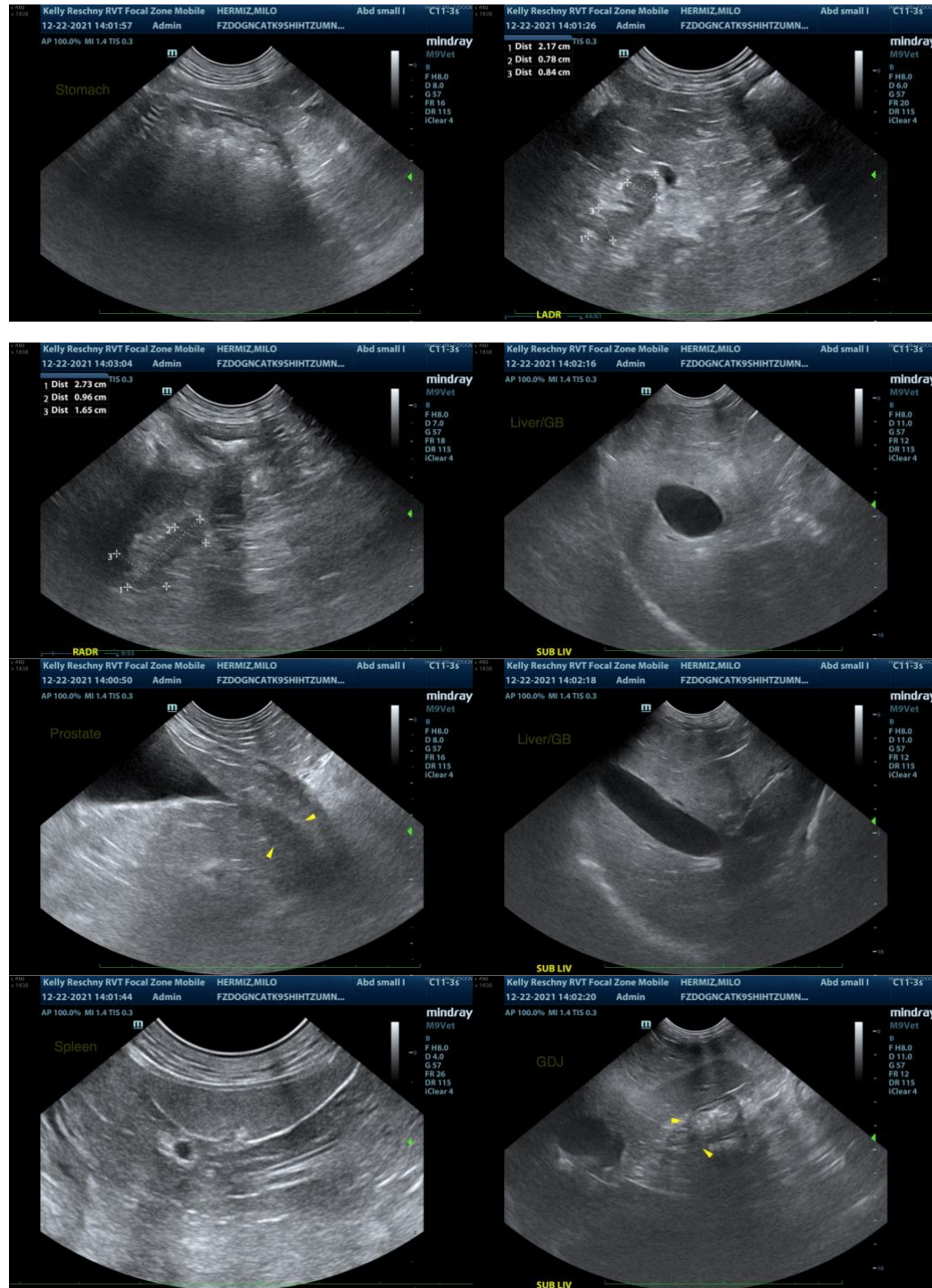
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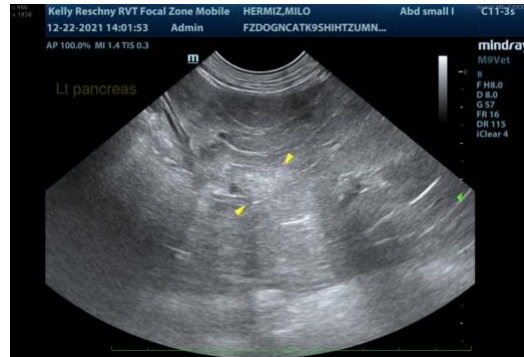
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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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