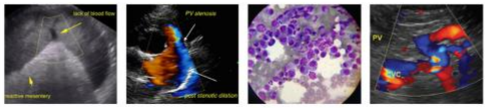


PATIENT

Neely Hanlon

SPECIES

Canine

BREED

Shih Tzu

SEX

Neutered Male

AGE

10 years

WEIGHT

16.6 lbs

INTERPRETED BY

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

IMAGING PERFORMED BY

Pamela Harrigan, RDCS

HOSPITAL NAME

Falmouth AH

REFERRING VET

Lilan Hauser, DVM

INVOICE

14205

DATE

8.23.23

PRESENTING CLINICAL SIGNS

History: Elevated liver values since May 2023. ALK P and GGT Asymptomatic. On Denamarin advanced since May 2023.

Abnormal PE/Chem/CBC/UA Results: ALT 139 sl H (unchanged); ALP 752H (was 503 2 months ago) (was normal) GGT 15sl H bili conjug: 0.2 sl H (was normal).

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder wall is normal in thickness and the mucosal surface is smooth. The bladder is moderately distended. Luminal contents are anechoic. No cystic calculi are observed. The region of the trigone and the proximal urethra, visible to a depth of 2 cm, are normal.

The prostate is normal in size (0.62 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 (3.95 cm in length) with a normal shape, architecture and smooth peripheral margins. The cortex is isoechoic relative to the spleen. There is a normal 1:3 cortex to medulla ratio with moderate loss of corticomedullary distinction. Trace pyelectasia is present (0.16 cm in the transverse plane). There is no evidence of nephroliths, infarcts or hydroureter.

The right kidney is normal in size (4.07 cm in length) with a normal shape, architecture and smooth peripheral margins. The cortex is isoechoic relative to the spleen. There is a normal 1:3 cortex to medulla ratio with moderate loss of corticomedullary distinction. Trace pyelectasia is present (0.14 cm in the transverse plane). There is no evidence of nephroliths, infarcts or hydroureter.

Adrenal Glands

The left adrenal gland is mildly enlarged (0.46 cm at cranial pole) (0.56 cm at caudal pole) with a normal shape and homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

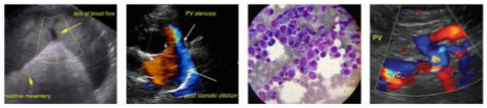
The right adrenal gland is in normal size (0.61 cm at cranial pole) (0.48 cm at caudal pole) with a normal shape and homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

Spleen

The spleen is normal in size (1.34 cm in width at the level of the hilus) with a normal capsular contour. There is appropriate echogenicity and echotexture. Ill-defined hyperechoic nodules/areas myelolipomas are observed along the medial aspect. Splenic vasculature is normal.

Liver

The liver is subjectively prominent in size with swollen curvilinear peripheral contours. The parenchyma is isoechoic relative to the spleen and exhibits mild heterogeneity. No distinct focal lesions are observed. Hepatic vasculature and biliary tracts are of normal volume with no evidence of congestion.



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The gall bladder is moderately distended. The wall is normal in thickness. A moderate-to-large amount of consolidated, 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.

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 is normal in thickness with a normal layering pattern and appropriate mural detail. Discreet masses are not identified. The ileocecocolic junction and colonic wall is normal. There is no evidence of an obstructive pattern.

Pancreas

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.

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

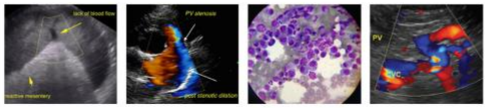
- The gallbladder changes are consistent with an emerging mucocele.
- The diffuse hepatic changes are non-specific and could be consistent with vacuolar hepatopathy, regenerative nodular hyperplasia, and/or age-related remodeling. Inflammatory and infiltrative disease are considered less likely.

Secondary Findings

- The hyperechoic lesions adjacent to the splenic vessels are most consistent with myelolipomas. Although a neoplastic process within the spleen cannot be excluded, it is considered unlikely in this patient.
- Mild left adrenomegaly
- Bilateral chronic renal changes with trace pyelectasia

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- Given the gall bladder changes, Ursodeoxycholic acid (Ursodiol) is recommended. Serial sonographic monitoring (e.g., every 6-8 weeks) of the gall bladder is recommended to assess for progression to a fully formed mucocele. If progression occurs, a cholecystectomy may be warranted.
- Serial monitoring (i.e., every 3-4 months) of the patient's liver values is recommended. If values continue to increase, a repeat abdomen ultrasound +/- a more advanced hepatic work-



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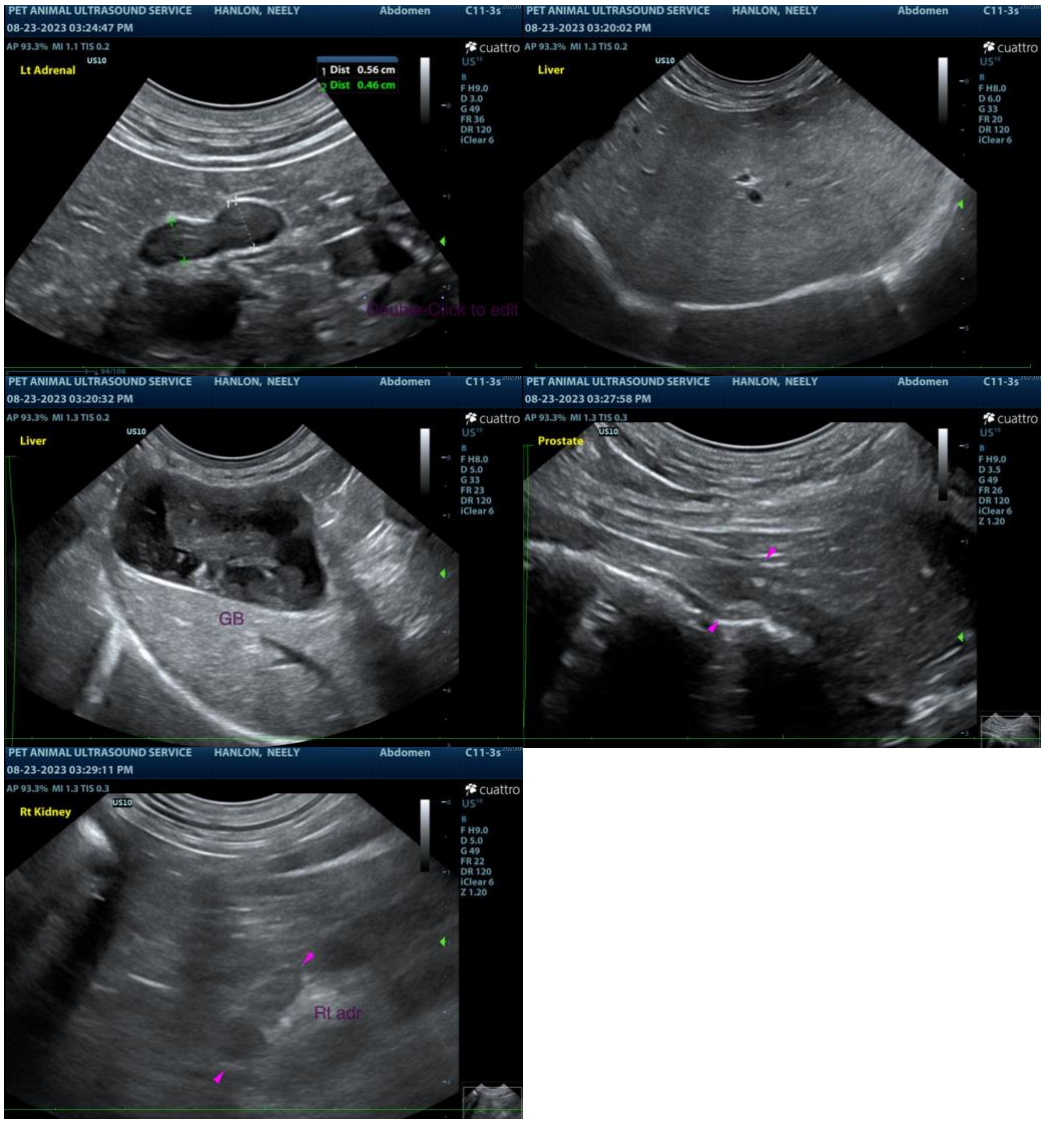
up (i.e., tissue sampling) may be warranted.

- Consider testing for hyperadrenocorticism with a low-dose dexamethasone suppression test or ACTH stimulation test if clinical signs (i.e., PU/PD) develop in the future.



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.

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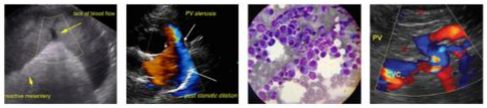
Pet Animal Ultrasound Service
4paus.com 781-635-5677



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EDUCATIONAL TELECONSULTATION SERVICES™
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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, MPH, DVM, Diplomate DACVIM (Small Animal Internal Medicine)
info@SonoPath.com