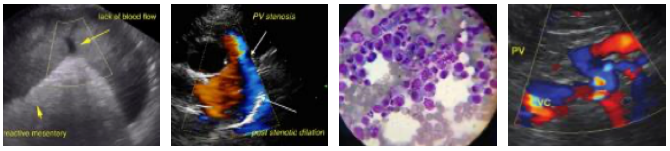
SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™



SonoPath.com
1-800-838-4268 info@sonopath.com

PATIENT
Aiden Williams

SPECIES
Canine

BREED
Jack Russell Terrier

SEX
Male, neutered

AGE
11 Yrs. 11 months

WEIGHT
24.2 lbs.

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

IMAGING PERFORMED BY
Kim Liedberg

HOSPITAL NAME
SVS Imaging WI

REFERRING VET
Dr. McCoy

INVOICE
14535

DATE
1/31/23

PRESENTING CLINICAL SIGNS

History: Presented for routine exam. BW showed elevated liver enzymes. No heart murmur or cough noted. Baseline echo to evaluate heart. No clinical symptoms. On no medications at this time. Patient presented on 10/3/22 to assess growth on left front foot. Discussed sedated mass removal with bx. Has hx of elevated ALP. Patient also has frequent acupuncture for back/rear end pain. Rec AUS due to continued increase of ALP. Exam findings and abnormal lab values: Labwork on 7/1/22: CBC: WNL, ALP: 382, ProBnp: 250, T4: 1.4, negative 4dx and fecal. Recommend AUS, but further workup prior to scan. Started with LDDST on 12/8/22, showed appropriate suppression, Cushings ruled out. UA done on 1/11/23, rare WBC/RBC, USG: 1.026, trace protein. On 1/18/23 BP via Doppler and recheck BW performed. BP Systolic numbers: 140, 160, 158, 150, 150, 140. Mean=149. ALP on BW now at 1168. CBC: Lymph 972, Mono 68. Remaining BW normal. O also requested full Cardio workup as patient has been on higher protein diet long term. Patient has hx of becoming hyperthermic on even mild sedation. Abnormal PE/Chem/CBC/UA Results: ALP 1,168 ProBNP 250

USG 1.026, inactive sediment.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder wall is normal in thickness and the mucosal surface is smooth. The bladder lumen is moderately distended with 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.

The prostate is normal in size (1.00 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 (4.86 cm in length) with a normal shape, smooth peripheral margins and normal internal architecture. There is mild to moderate loss of corticomedullary distinction. Several hyperechoic shadowing diverticular foci are observed. There is no evidence of pyelectasia, infarcts or hydronephrosis.

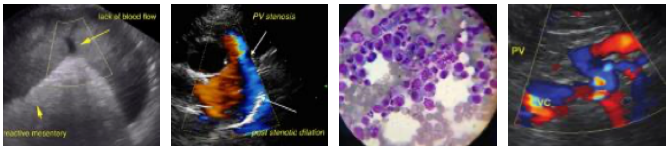
The right kidney is normal in size (5.25 cm in length) with a normal shape, smooth peripheral margins and normal internal architecture. There is mild loss of corticomedullary distinction. Several hyperechoic shadowing diverticular foci are observed. There is no evidence of pyelectasia, infarcts or hydronephrosis.

Adrenal Glands

The left adrenal gland is mildly enlarged (0.54 cm at cranial pole) (0.96 cm at caudal pole) with a slightly irregular shape at the caudal pole. The parenchyma is mildly heterogeneous at the caudal aspect. The glandular echogenicity and detail at the cranial aspect are unremarkable. The phrenicoabdominal vein and surrounding vasculature appear normal.

The right adrenal gland is normal size (0.50 cm at cranial pole) (0.50 cm at caudal pole); 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



SonoPath.com
1-800-838-4268 info@sonopath.com

PATIENT
Aiden Williams

SPECIES
Canine

BREED
Jack Russell Terrier

SEX
Male, neutered

AGE
11 Yrs. 11 months

WEIGHT
24.2 lbs.

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

IMAGING PERFORMED BY
Kim Liedberg

HOSPITAL NAME
SVS Imaging WI

REFERRING VET
Dr. McCoy

INVOICE
14535

DATE
1/31/23

The spleen is normal in size (0.83 cm in width at the level of the hilus) with a normal capsular contour. The parenchyma is subtly mottled in appearance. No focal lesions are observed. Splenic vasculature is normal.

Liver

The liver is normal to slightly prominent in size with normal curvilinear peripheral contours. The parenchyma is isoechoic relative to the spleen and diffusely homogeneous in appearance. No distinct focal lesions are observed. Vascular and biliary tracts are of normal volume with no evidence of congestion. The gall bladder lumen is moderately distended. The wall is thin and smooth. A 0.25 cm cholelith is observed within the lumen along with a scant amount of echogenic to mineralized debris. The cystic and common bile ducts are normal/not seen.

Gastrointestinal

The gastric lumen is mildly to moderately fluid 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 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 disease is noted.

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

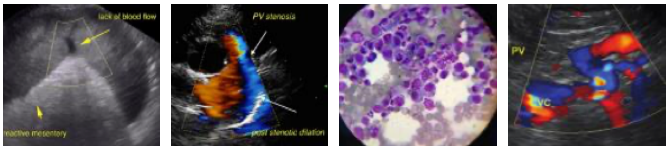
Primary Findings:

- Non-specific diffuse hepatopathy. Vacuolar hepatopathy (i.e., idiopathic, endocrine) is suspected. Inflammatory disease is considered less likely in light of the normal ALT. Infiltrative neoplasia (i.e., lymphoma) is possible but also considered less likely given that the patient is asymptomatic.

Secondary Findings:

- The left adrenal changes are most consistent with hyperplastic change.
- Bilateral, chronic, age-related renal changes with dystrophic mineralization.
- The splenic parenchymal changes are most consistent with a benign process such as lymphoid hyperplasia, extramedullary hematopoiesis, splenitis or antigenic stimulation with a low possibility of infiltrative neoplasia (i.e., lymphoma, mast cell neoplasia).
- Small cholelith- incidental/non-obstructive.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS



SonoPath.com
1-800-838-4268 info@sonopath.com

PATIENT

Aiden Williams

SPECIES

Canine

BREED

Jack Russell Terrier

SEX

Male, neutered

AGE

11 Yrs. 11 months

WEIGHT

24.2 lbs.

INTERPRETED BY

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

IMAGING PERFORMED BY

Kim Liedberg

HOSPITAL NAME

SVS Imaging WI

REFERRING VET

Dr. McCoy

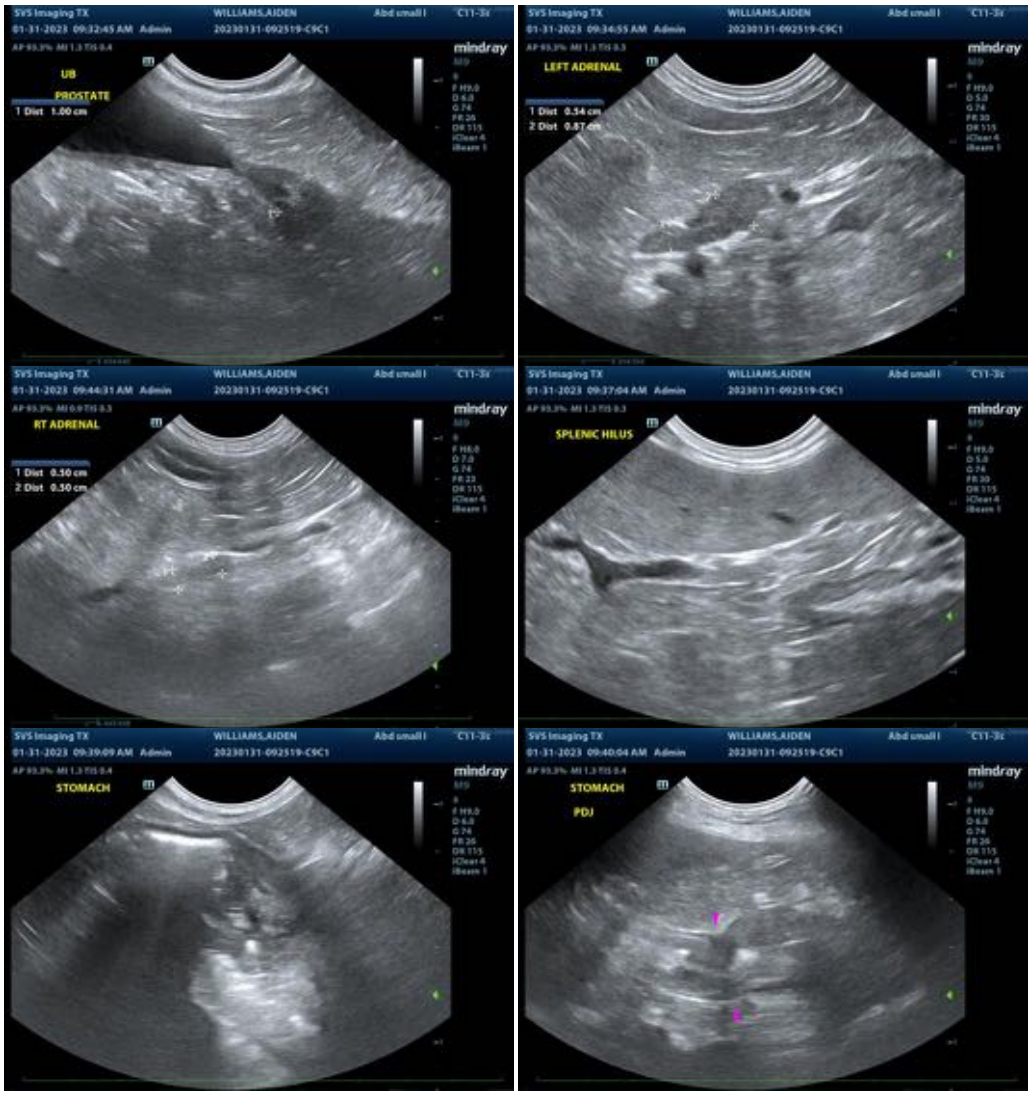
INVOICE

14535

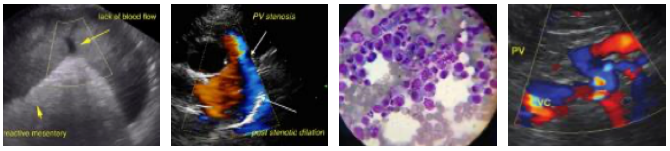
DATE

1/31/23

- Consider pre- and post-prandial serum bile acids to assess hepatic function.
- Serial monitoring (i.e., every 3-4 months) of the patient's liver values is recommended. If liver values continue to increase, a repeat abdominal ultrasound +/- hepatic tissue sampling may be warranted.
- Consider repeat 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.



SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™



SonoPath.com
1-800-838-4268 info@sonopath.com

PATIENT

Aiden Williams

SPECIES

Canine

BREED

Jack Russell Terrier

SEX

Male, neutered

AGE

11 Yrs. 11 months

WEIGHT

24.2 lbs.

INTERPRETED BY

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

IMAGING PERFORMED BY

Kim Liedberg

HOSPITAL NAME

SVS Imaging WI

REFERRING VET

Dr. McCoy

INVOICE

14535

DATE

1/31/23

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