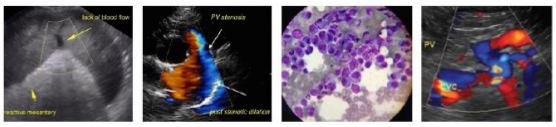
SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
1-800-838-4268 info@sonopath.com SonoPath.com



THE FOCAL ZONE
IMAGING PERFORMED BY
289-808-2608 info@thefocalzone.com

PATIENT

Abi Paddison

SPECIES

Canine

BREED

Shih Tzu X

SEX

Spayed Female

AGE

12 years

WEIGHT

13. 8 lbs

INTERPRETED BY

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

IMAGING PERFORMED BY

Kelly Reschny

HOSPITAL NAME

Village Centre AH

REFERRING VET

Dr. Kunnath

INVOICE

10936

DATE

5/19/22

PRESENTING CLINICAL SIGNS

History: clinically healthy, elevated liver enzymes

Abnormal PE/Chem/CBC/UA Results: Alb 4.8 (2.5-4.4) Alp 1238 (20-150) Alt 323 (10-118)

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder, trigone, and pelvic urethra are 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 left kidney is normal in size (3.92 cm in length); with a normal shape and smooth peripheral contours. The cortex is thickened and hyperechoic. There is moderate loss of corticomedullary distinction. Hyperechoic shadowing diverticular foci are visualized. There is no evidence of pyelectasia, infarcts or hydroureter. Renal vasculature is normal.

The right kidney is normal size (3.90 cm in length); with a normal shape and smooth peripheral contours. The cortex is thickened and hyperechoic. There is moderate loss of corticomedullary distinction. A few, small, nonobstructive are present. There is no evidence of pyelectasia, infarcts or hydroureter. Renal vasculature is normal.

Adrenal Glands

The left adrenal gland is normal size (0.53 cm at cranial pole) (0.50 cm at caudal pole) (1.70 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.

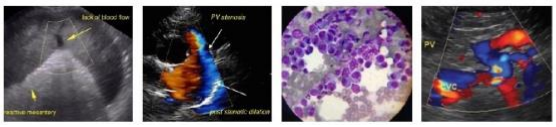
The right adrenal gland is normal size (1.07 cm at cranial pole) (0.43 cm at caudal pole) (1.94 cm in length); normal shape; homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

Spleen

The spleen is normal in size (1.30 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.

Liver

The liver is subjectively enlarged with slightly swollen peripheral contours. The parenchyma is isoechoic relative to the spleen and diffusely homogeneous in appearance. At least one small parenchymal cyst is present, the largest measuring 0.70 cm on the left side. 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 small amount of aggregated echogenic partially dependent debris is observed within the lumen. The cystic and common bile ducts are normal/not seen.



PATIENT

Abi Paddison

SPECIES

Canine

BREED

Shih Tzu X

SEX

Spayed Female

AGE

12 years

WEIGHT

13. 8 lbs

INTERPRETED BY

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

IMAGING PERFORMED BY

Kelly Reschny

HOSPITAL NAME

Village Centre AH

REFERRING VET

Dr. Kunnath

INVOICE

10936

DATE

5/19/22

The gall bladder lumen is moderately distended. The wall is normal in thickness. A few polypoid-like lesions are arising from the luminal surface. A small amount of gravity dependent, echogenic debris is seen. 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 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 right limb of the pancreas is visible with normal curvilinear peripheral contours. The parenchyma is largely isoechoic 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.

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

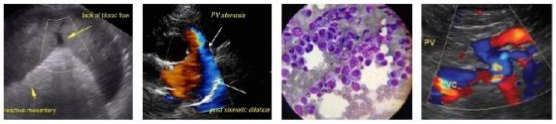
- The diffuse hepatic changes are non-specific and could be consistent with vacuolar hepatopathy, regenerative nodular hyperplasia, and/or age-related remodeling. Inflammatory and infiltrative disease are considered less likely.
- The small, hepatic parenchymal cysts are likely a benign incidental finding.

Secondary Findings

- The pancreatic changes are most consistent with age-related parenchymal remodeling, potentially secondary to a prior inflammatory episode, early fibrosis or chronic pancreatitis.
- The bilateral renal changes are most consistent with chronic interstitial nephrosis/nephritis with dystrophic mineralization and right nonobstructive nephrolithiasis.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- Pre-and postprandial serum bile acids can be considered to further evaluate hepatic function.
- If a conservative approach is desired, consider serial monitoring (i.e., every 3-4 months) of the patient's liver values to assess for progression. If values continue to increase, consider a repeat ultrasound +/- hepatic tissue sampling.



PATIENT

Abi Paddison

SPECIES

Canine

BREED

Shih Tzu X

SEX

Spayed Female

AGE

12 years

WEIGHT

13. 8 lbs

INTERPRETED BY

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

IMAGING PERFORMED BY

Kelly Reschny

HOSPITAL NAME

Village Centre AH

REFERRING VET

Dr. Kunnath

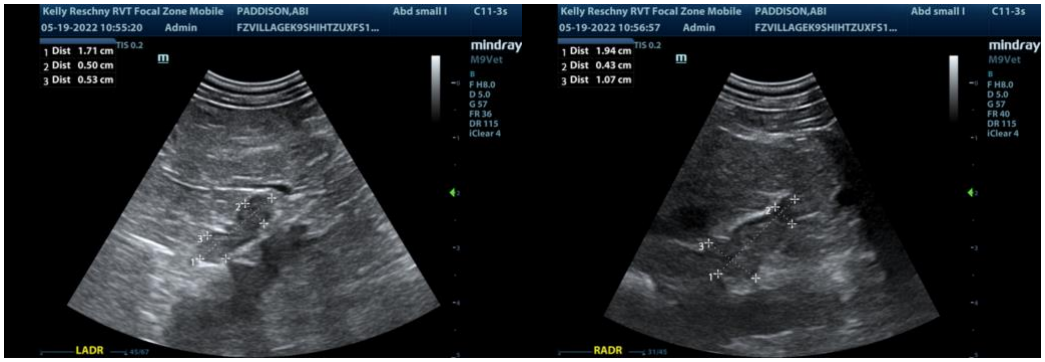
INVOICE

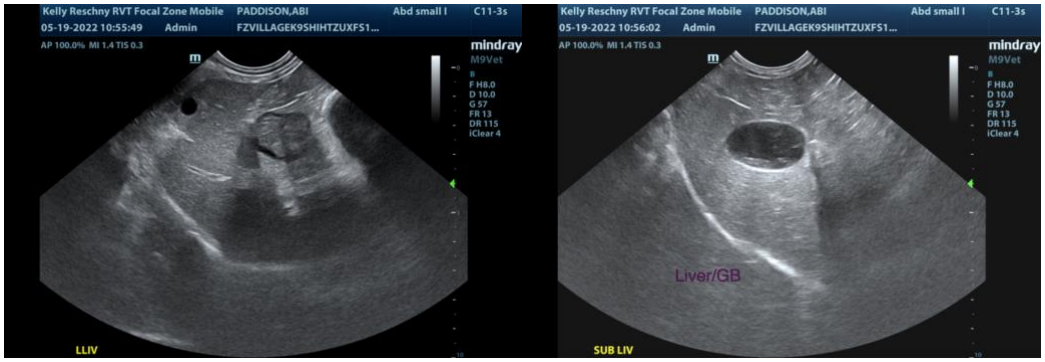
10936

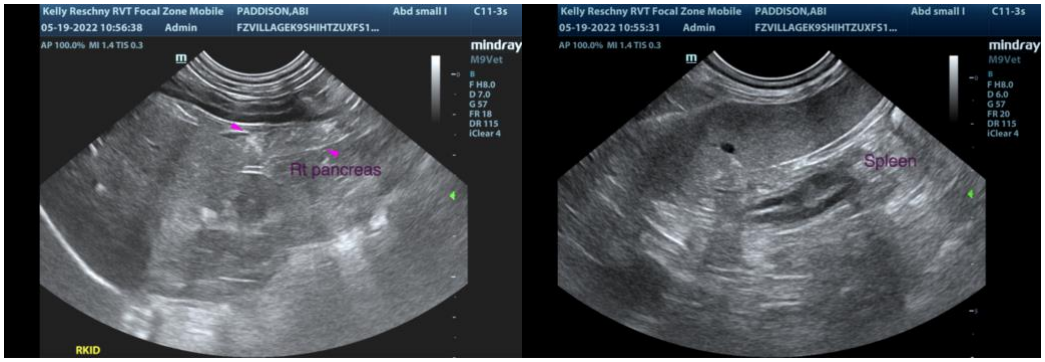
DATE

5/19/22

- If a more aggressive approach is desired at this time, a fine-needle aspirate or surgical biopsy can be considered. If biopsies are pursed, aerobic and anaerobic bile cultures are recommended along with acquisition of additional hepatic tissue samples for potential copper quantitation. Given the patient's age thoracic radiographs are recommended prior to any anesthetic event.







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 DACVIM (Small Animal Internal Medicine)
info@SonoPath.com