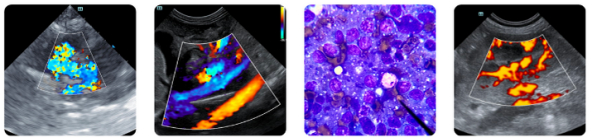


SonoPath.com info@sonopath.com 1.800.838.4268

PATIENT

Sophie Worthington

SPECIES

Canine

BREED

Shih Tzu

SEX

Female Spayed

AGE

12 yrs

WEIGHT

17 lbs

INTERPRETED BY

R. McKenzie Daniel, DVM, DABVP (Canine and Feline)

IMAGING PERFORMED BY

Mack

HOSPITAL NAME

Northside VC

REFERRING VET

Mack

INVOICE

12938

DATE

12/12/25

PRESENTING CLINICAL SIGNS

History: Patient presented for routine dental cleaning, pre-anesthetic bloodwork showed elevate liver enzymes, no noticeable symptoms at home per owner.

Abnormal PE/Chem/CBC/UA Results: ALT- 217 ALKP- 373 ALB 4.1

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of 2.0 cm exhibited normal thickness and tone. Primarily anechoic urine was present in the lumen. Mild, non-dependent, echogenic to particulate sediment was present without evidence of mineral or calculus formation. The ureteral papillae were normal. The ureters were not visible which is normal. No evidence of inflammatory or neoplastic mural changes were noted.

Normal size and margination was present in the kidneys. A normal 1:3 cortex / medulla ratio was maintained. The medulla and cortices were uniform in texture with some increased echogenicity and mild loss of corticomedullary symmetry and definition expected for the age of the patient. No evidence of pelvic dilation was present. The left kidney exhibited hyperechoic cortex striations which may indicate cortical infarction, mineralization or fibrosis as well as intermittent, small cortical cyst. The left kidney measured 4.2 cm in length. The right kidney exhibited mild medullary mineral. The right kidney measured 4.2 cm in length.

Adrenal Glands

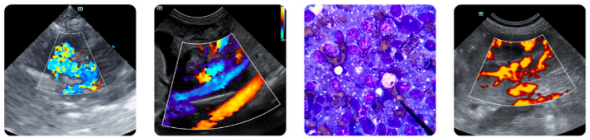
The left adrenal gland was enlarged in size primarily in the caudal pole with caudal pole measuring ~1.2 cm width. The cranial left adrenal gland measured 0.61 cm width. The left adrenal gland exhibited indistinct, non-mineralized nodular changes. The right adrenal gland enlarged in size primarily in the caudal pole and was larger in size compared to the left adrenal gland. The right adrenal gland exhibited indistinct, non-mineralized nodular changes. The right adrenal gland measured 1.4 cm cranial pole width x 1.7 cm caudal pole width.

Spleen

The spleen exhibited a finely textured and homogenous parenchyma which was hyperechoic to the liver and renal cortical parenchyma. The capsule was smooth and regular without apparent expansion. The splenic vasculature at the hilus was normal in volume with no evidence of congestion or thrombosis. Acute to chronic inflammatory, neoplastic, or benign parenchyma changes were not noted.

Liver

The liver presented subjective mildly enlarged in size. The parenchyma of the liver was subjectively normal in echogenicity compared to the spleen and renal cortices. The liver parenchyma was uniform with a mildly coarse echotexture. The capsule of the liver was symmetrically rounded to mildly swollen in margination. The hepatic and portal vasculature were normal in appearance without signs of congestion. The gallbladder was non distended in size with mild, congealed, echogenic, nonmineralized biliary sludge in the cranial lumen. The common bile duct was not visualized.



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Gastrointestinal

The stomach presented intact wall layering with a normal wall layer ratio. The lumen of the stomach was empty with no signs of ileus, obstruction or foreign material.

The small intestine presented intact wall layering with 1:3 muscularis/mucosa ratio. The lumen of the small intestine was empty with no signs of ileus, obstruction or foreign material.

Normal visible colon wall layers were present with apparent formed feces in lumen.

Pancreas

The area of the pancreas was sonographically normal.

Free Abdomen

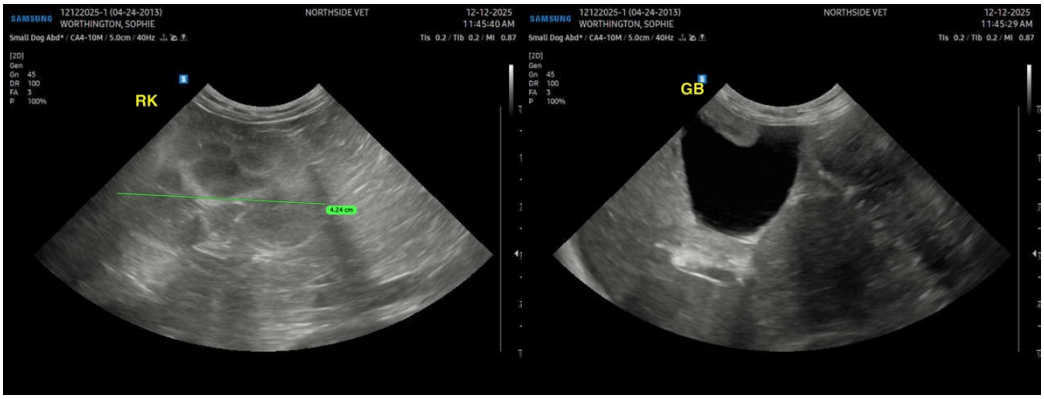
No overt lymphadenopathy or peritoneal effusion was present.

ULTRASONOGRAPHIC FINDINGS

- Hepatopathy – subjective benign, vacuolar hepatopathy, inflammatory disease, hyperplasia, non-obstructive cholestasis, hepatic neoplasia thought less likely
- Mild, congealed gallbladder debris (non-mucocele)
- Mild chronic renal changes exhibiting cortical hyperechoic striations and mild right kidney mineral
- Bilateral enlarged nodular adrenal glands – hyperplasia, functional vs non-functional adenomas, unilateral/bilateral adrenal tumors or mixed pathologies possible

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Both adrenal glands are abnormal and exhibit potential for bilateral adrenal tumors. Adrenal workup with LDDST indicated if clinical signs consistent with Cushing's Syndrome are non-reported or arise. Serial monitoring of systemic BP for hypertension and +/- urine metanephrine level if concern for pheochromocytoma is recommended. Hepato-supportive medications may prove beneficial. Serial sonographic monitoring of the bilateral adrenal glands or consideration for abdominal CT for further clarification indicated.



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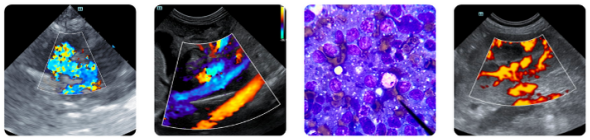

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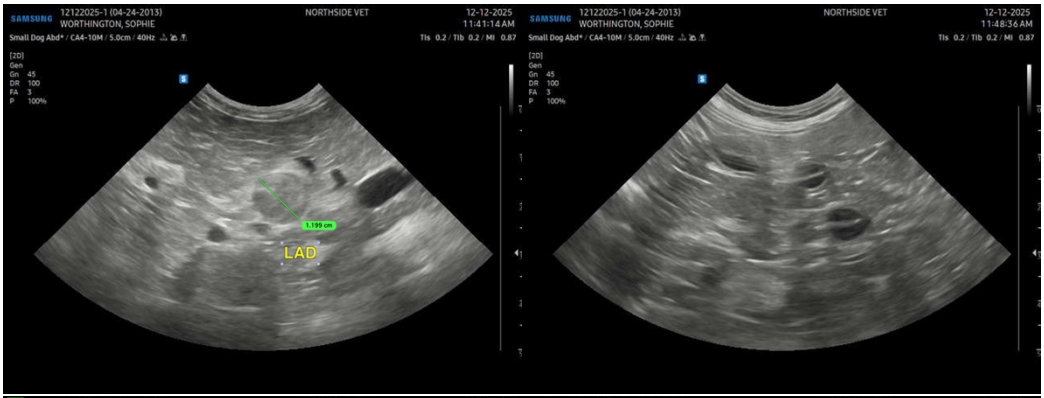

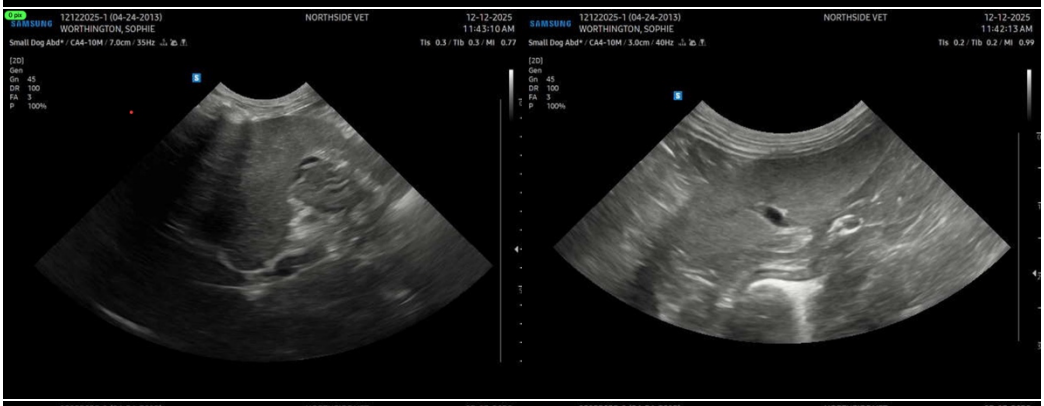

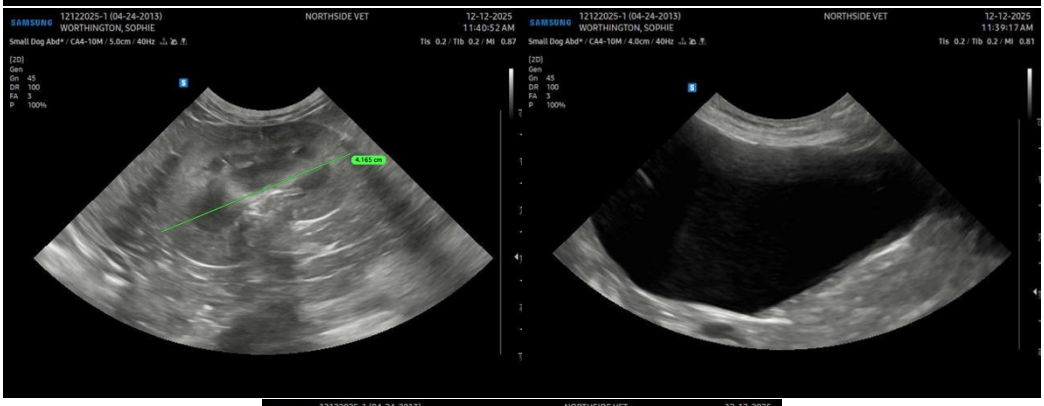

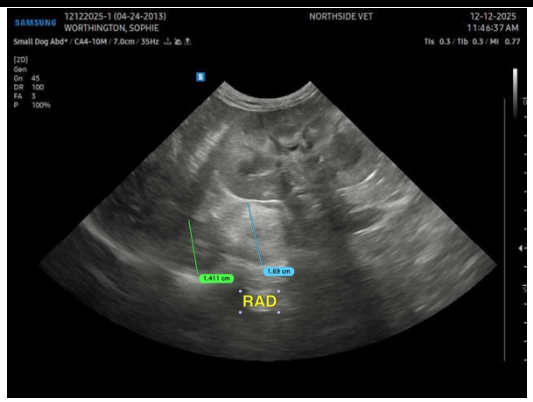

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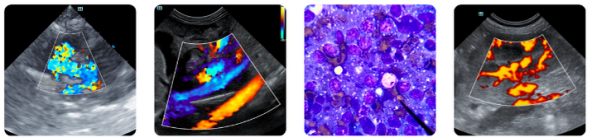

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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

R. McKenzie Daniel, DVM, DABVP (Canine / Feline Practice)

info@sonopath.com