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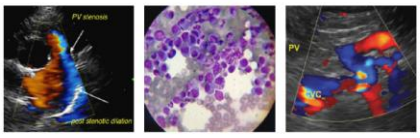

SonoPath
Clinical Sonography & Telecytology
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PATIENT

Theo Underwood

SPECIES

Canine

BREED

Japanese Chin

SEX

MN

AGE

10 years

WEIGHT

15 lbs.

INTERPRETED BY

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

IMAGING PERFORMED BY

Rachel Runnells, RVT

HOSPITAL NAME

SVS Imaging KC

REFERRING VET

Dr. Kissinger

INVOICE

14010

DATE

6/3/22

PRESENTING CLINICAL SIGNS

Presented for dental and had abnormal pre-surgical bloodwork, No clinical signs.
Abnormal PE/Chem/CBC/UA Results: Grade 2/4 dental disease. Presurgical bw showed an elevated tbili (1.5) ALP (232) TP (9.2), Globulins (5.3), BUN (30), and platelets (1200). The patient was sent home on antibiotics and denamarin with instructions to repeat bw in 2 weeks. Repeat bw showed elevated TP (7.6), ALP (325), and platelets (465).

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. Anechoic urine was present in the lumen with no uroliths or sediment. The ureteral papillae were normal. The ureters were not visible which is normal. No evidence of inflammatory or neoplastic changes was noted.

No overt pathology was noted in the area of the residual prostate.

The area of the aortic trifurcation was free of pathology.

Normal size and margination were 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. Areas of mild nonobstructive medullary mineral were noted. No evidence of pelvic dilation was present. The left kidney measured 4.0 cm in length. The right kidney measured 4.5 cm in length.

Adrenal Glands

The bilateral adrenal glands were normal in size. Mild parenchyma heterogeneity and mild capsule asymmetry was present without suspicion for overt neoplasia. The left adrenal gland measured 0.52 cm width in the cranial pole and 0.59 cm width in the caudal pole. The right adrenal gland measured 0.44 cm width in the cranial pole and 0.42 cm width in the caudal pole. No evidence of hyperplasia or adrenal tumors was noted.

Spleen

The spleen exhibited primarily finely textured and homogenous parenchyma which was hyperechoic to the liver and renal cortical parenchyma. Several, nondisruptive, echogenic nodules were present throughout the medial 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 or neoplastic changes were not noted. The echogenic nodules tend to trend benign and are most consistent with benign hyperplasia or myelolipomas.

Liver/ Gallbladder

The liver was subjectively normal in size, structure, and contour. The liver parenchyma was mildly nonuniform and hypoechoic to the spleen with a moderate coarse echotexture and subjective mild to benign parenchymal remodeling. The hepatic and portal vasculature were normal in appearance without signs of congestion.

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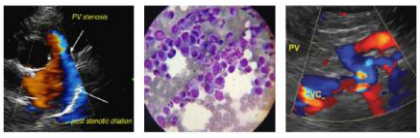

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The gallbladder was non-distended in size containing primarily anechoic content with minor luminal debris. No evidence of gallbladder or peripheral gallbladder Inflammation was noted. The cystic and common bile ducts were normal.

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 pancreas was normal in size and contour with mildly heterogeneous parenchyma compared to adjacent omentum. No signs of active inflammation or neoplasia.

Free Abdomen

No overt lymphadenopathy or peritoneal effusion was present.

ULTRASONOGRAPHIC FINDINGS

- Benign splenic nodules - consistent with myelolipomas
- Mild chronic renal changes with minor medullary mineral
- Benign hepatopathy exhibiting mild parenchymal remodeling
- Minor gallbladder debris (non-mucocele)
- Minor pancreatic remodeling - likely patient variant and incidental

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The overall appearance of the liver was nonspecific yet consistent with benign hepatopathy and suggestive of vacuolar hepatopathy with likely nonobstructive or nonclinical cholestasis. Inflammatory hepatopathy i.e., cholangiohepatitis, given the presence of minor gallbladder debris is possible, yet considered less likely. No overt evidence of hepatobiliary neoplastic criteria. Hepatosupportive medications including Denamarin and Ursodiol may prove benefice. No overt anesthetic contraindications given no significant abnormal albumin, glucose, cholesterol, and BUN levels.

The bilateral adrenal glands and overall hepatic presentation were not overtly suggestive of Cushing's Syndrome. However, if clinical signs i.e., PU/PD, Polyphagia, etc., arise, adrenal workup could be considered.

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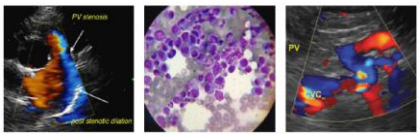

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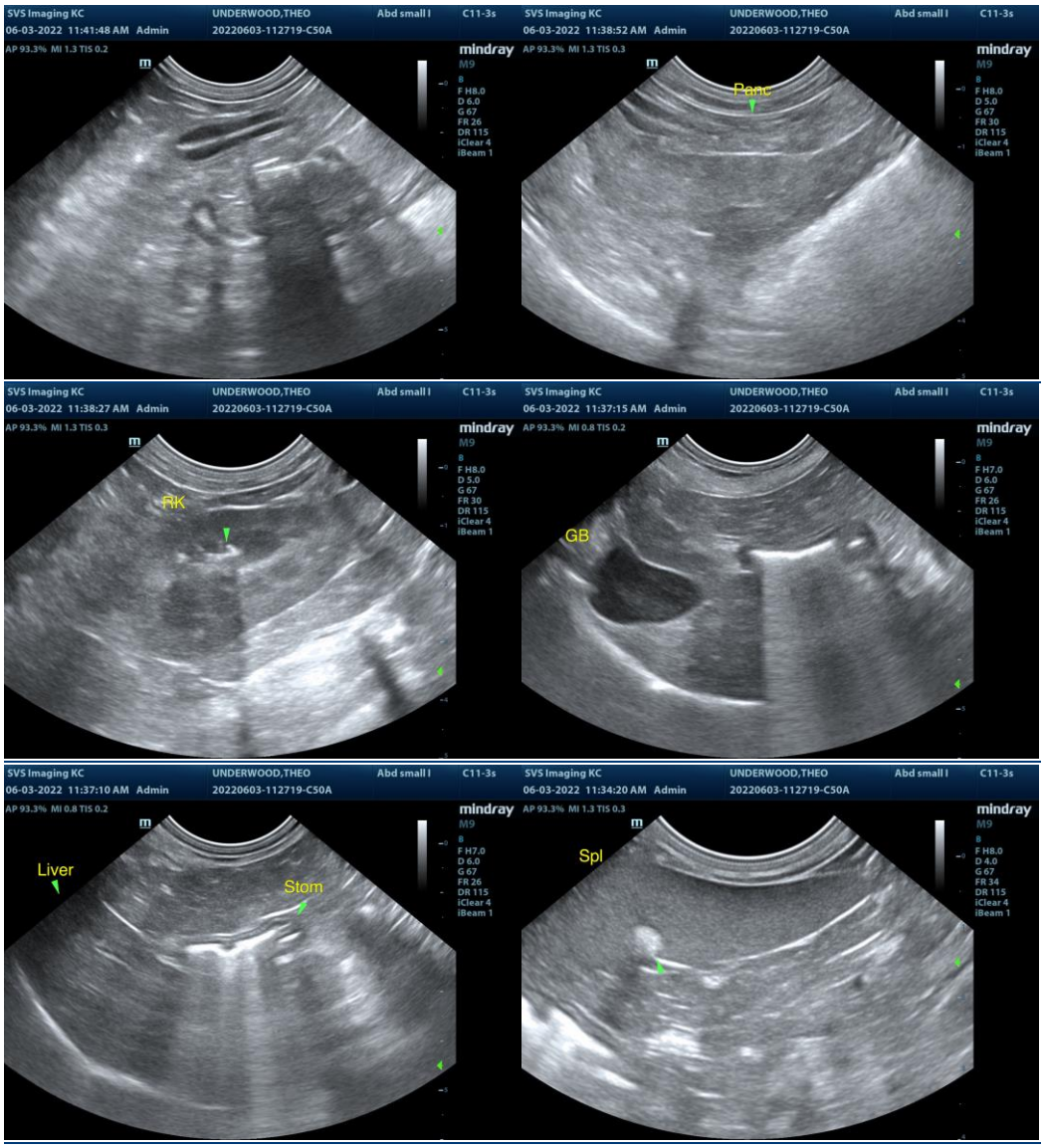

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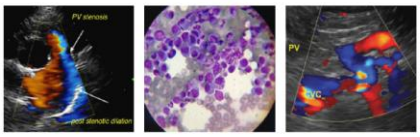

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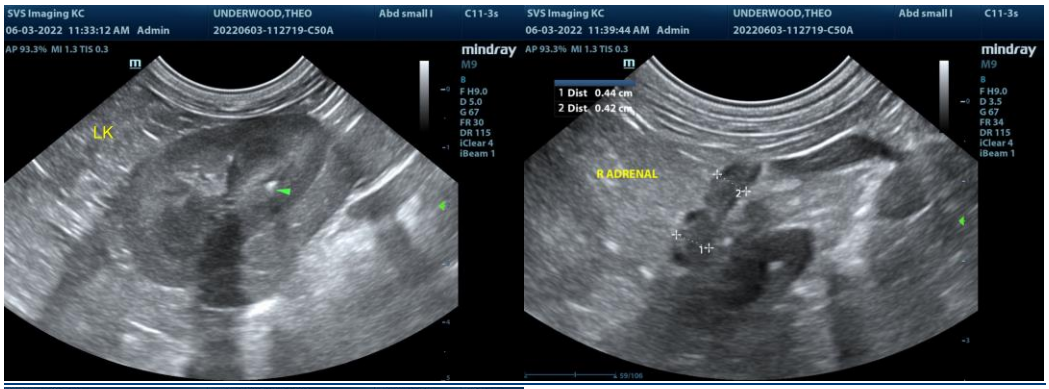

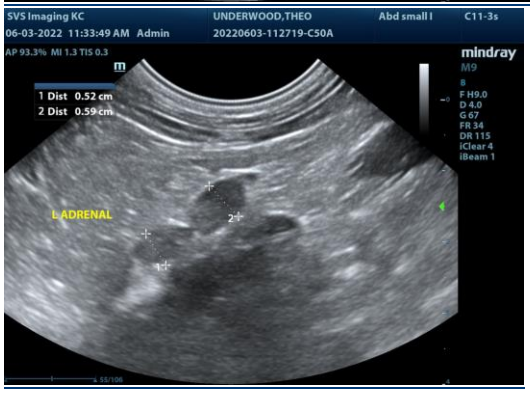

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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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