



PATIENT PRESENTING CLINICAL SIGNS

William Olsen History: Elevated liver enzymes for ~3 years, PU/PD, painful abdomen, 2 day duration anorexia, vomiting, soft stool

SPECIES Medication: Ursodial, Denamarin, Cerenia, Metronidazole, Hydromorphone

Canine WBC 19.8 w/neutrophilia and monocytosis. BUN 3, ALP 1489, ALT 128, GGT 14, TBili 0.6, USG 1.005, pH 9, negative protein and glucose.

BREED ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Min Pin Mix **Urinary System**

The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of 3.0 cm exhibited normal thickness and tone. Anechoic urine was present in the lumen. Mild non-obstructive dependent mineral to small calculi noted in the cystourethral junction and proximal urethra. The ureteral papillae were normal. The ureters were not visible which is normal. No evidence of inflammatory or neoplastic changes were noted.

SEX
 Neutered Male

AGE The area of the aortic trifurcation was free of pathology.

10 years 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 loss of corticomedullary symmetry and definition expected for the age of the patient. Medullary non-obstructive mineralization to renolithiasis present in both kidneys. Mild pyelectasia noted in the left kidney. The left kidney measured 6.6 cm. The right kidney measured 6.1 cm.

WEIGHT
 29 Pounds

Adrenal Glands

INTERPRETED BY An asymmetrically marginated, expansive, non-homogeneous mass was present in the left adrenal gland, exhibiting focal cystic component, measuring 5.0 cm x 4.4 cm. Associated left retroperitonitis exhibited by increased retroperitoneal echogenicity and concurrent retroperitoneal free fluid was present around the left adrenal gland and left kidney, extending caudally to the level of the urinary bladder.

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

The right adrenal gland was normal in size. Mild parenchyma heterogeneity and mild capsule asymmetry was present without suspicion for overt neoplasia. The right adrenal gland measured 1.7 cm length x 0.56 cm at the caudal pole.

IMAGING PERFORMED BY

Rebekah Jakum, CVT
 ARDMS/RVT

Spleen

HOSPITAL NAME

White Haven VH

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.

REFERRING VET

Dr. Dengler

Liver

The liver presented 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, echogenic, nonmineralized biliary sludge. The cystic duct and common bile ducts were normal without evidence of dilation.

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PATIENT *Gastrointestinal*

William Olsen 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. Gastric body wall measured 0.46 cm.

SPECIES 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. Jejunum wall measured 0.30 cm.
Canine

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

BREED *Pancreas*

Min Pin Mix The parenchyma of the left limb, body and right limb of the pancreas presented isoechoic to the adjacent omental fat. A normal curvilinear capsule contour of the pancreas was present. The visible pancreatic duct was normal. No signs of active inflammation or neoplastic disease was evident.

SEX Neutered Male *Free Abdomen*

Free Abdomen
No overt lymphadenopathy.

AGE 10 years

ULTRASONOGRAPHIC FINDINGS

WEIGHT 29 Pounds

- Non-obstructive urinary bladder and proximal urethral mineral/small calculi
- Bilateral chronic renal changes with non-obstructive medullary mineralization/renolithiasis and minor left kidney pyelectasia.
- Expansive left adrenal mass with associated left retroperitonitis
- Hepatopathy with minor gallbladder debris (non-mucocele)

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

INTERPRETED BY

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(Canine and Feline)

Left adrenal neoplasia is probable (adenocarcinoma, pheochromocytoma, or other). Full urinary workup including urine culture and sensitivity, urine protein/creatinine ratio, as well as adrenal testing including LDDST +/- urine catecholamine levels warranted. Potential for vascular invasion associated with the left adrenal mass cannot be excluded. Additionally, the possibility of concurrent left adrenal necrosis resulting in left retroperitonitis may be possible. CT assessment of the left adrenal mass for further clarification, assessment of vascular invasion, and surgical resectability is recommended. No overt evidence of associated metastatic disease Continued as-needed gastrointestinal support and 3-view chest radiographs recommended.

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PATIENT

William Olsen

SPECIES

Canine

BREED

Min Pin Mix

SEX

Neutered Male

AGE

10 years

WEIGHT

29 Pounds

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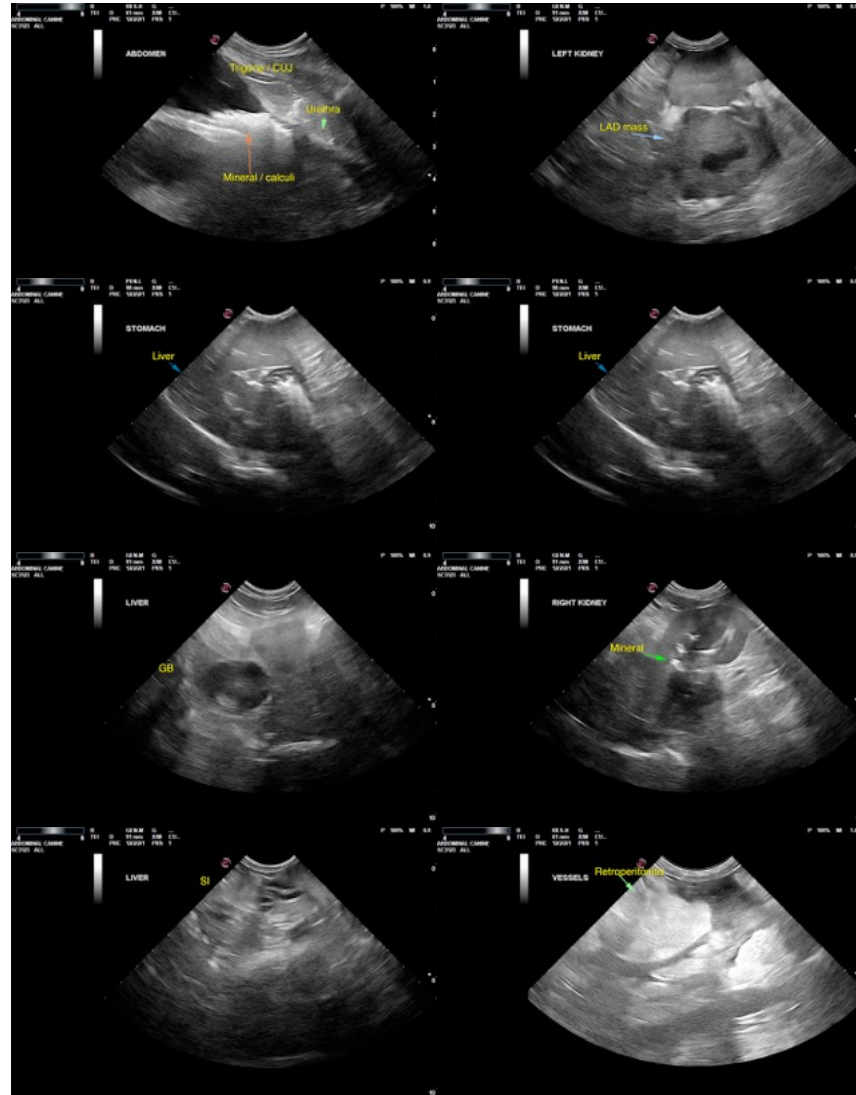
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

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