



PATIENT

Briana Redmon

SPECIES

Canine

BREED

Mixed

SEX

FS

AGE

12yr

WEIGHT

34lb

INTERPRETED BY

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

IMAGING PERFORMED BY

Dr. Puthoff

HOSPITAL NAME

Kings Veterinary
Hospital

REFERRING VET

Dr. Puthoff

INVOICE

12684ag

DATE

01/16/2023

PRESENTING CLINICAL SIGNS

Briana presents for continued inappetence. She has a history of diabetes (managed on vetsulin), PLN (managed on enalapril), and hypothyroidism (managed on levothyroxine). Has historic elevations in ALKP - last abdominal ultrasound performed in spring 2021 consistent with vacuolar hepatopathy. New ALT elevation noted April 2022 but was showing GI signs and PLI was over 2000 - recheck ALT after clinical signs resolved was WNL. Briana became inappetent 5 days ago - no vomiting/diarrhea, no change in energy, no change in water intake/urinations. Bloodwork showed recurrent mild elevation in ALT (166), continued increase in ALKP (1766), mild hyponatremia/hypochloremia, remainder unremarkable. Urinalysis quiet with no ketones, PLI normal. She was given a cerenia injection - afterwards, she ate for roughly 24 hours but then presented this morning with recurrent inappetence and 'bad breath' per owner. Mild dehydration on PE, abdomen soft with no tenderness, no fever - remainder unremarkable. Radiographs showed some punctate mineral opacity in the area of either gallbladder or stomach, no obstructive patterns. Ultrasound recommended.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of 3 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 were noted.

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. No evidence of pelvic dilation was present. The left kidney measured 5.8 cm in length. The right kidney measured 5.7 cm in length.

The area of the aortic trifurcation was free of pathology.

Adrenal Glands

The left adrenal gland was not definitively visualized.

Potential ill-defined non-homogenous mass present in the area of the right adrenal gland measuring 4.2 cm x 3.2 cm.

Spleen

The spleen exhibited normal size, areas of capsule asymmetry with generalized parenchyma heterogeneity and multifocal pinpoint hyperechoic foci. Intermittent discrete non-disruptive hypoechoic splenic nodules were present, an example measured 1.6 cm in diameter. The splenic vasculature at the hilus was normal in volume with no evidence of congestion or thrombosis.

Liver/Gallbladder

Moderate hepatomegaly exhibiting maintained symmetrical capsule contour and generalized non-homogenous mild hyperechoic parenchyma was present. A non-homogenous mildly expansive mass lesion in the ventral to ventrocaudal liver was present with subjective centralized cystic component measuring 4.5 cm in diameter. The gallbladder was non-distended in size with thin walls and primarily anechoic luminal content with mild echogenic non-organized debris. The cystic and common bile ducts were normal.

Gastrointestinal



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The stomach presented intact mildly prominent walls. The lumen of the stomach contained mild retained variably echogenic non-shadowing ingesta/fluid with no signs of ileus, obstruction or foreign material.

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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.

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Pancreas

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

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Free Abdomen

No omental masses, overt lymphadenopathy or peritoneal effusion was present.

ULTRASONOGRAPHIC FINDINGS

AGE

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- Hepatomegaly exhibiting non-homogenous parenchyma, solitary mildly expansive non-homogenous centrally cystic mass ventral/ventrocaudal liver-nonspecific, diabetic hepatopathy, inflammatory/immune mediated disease, hyperplasia, hematopoiesis, fibrosis, focal atypical cyst, abscess, necrosis, primary or metastatic neoplasia all potentials
- Mild gallbladder debris (non-mucocele)
- Non-specific hypoechoic splenic nodules with suspect multifocal microinfarction, fibrosis or mineralization
- Heterogenous pancreas-no sonographic evidence of pancreatitis or pancreatic neoplasia
- Suspect mild hypomotile gastritis, sonographically unremarkable small bowel
- Potential ill-defined mass in the area of the right adrenal gland

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INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Assuming normal clotting status and using a 25g needle, a hepatosplenic FNA for screening cytology is warranted for further assessment.

Potentially recurring flare ups of chronic pancreatitis may be of concern. No evidence of GI mechanical obstructive criteria was present.

Ideally sonographic reassessment of the right adrenal gland area with screening BP is advised to assess for evidence of hypertension which may allude to emerging right adrenal neoplastic criteria i.e. pheochromocytoma.

Empirically, as needed GI support and therapy for possible low-grade chronic pancreatitis would be reasonable.

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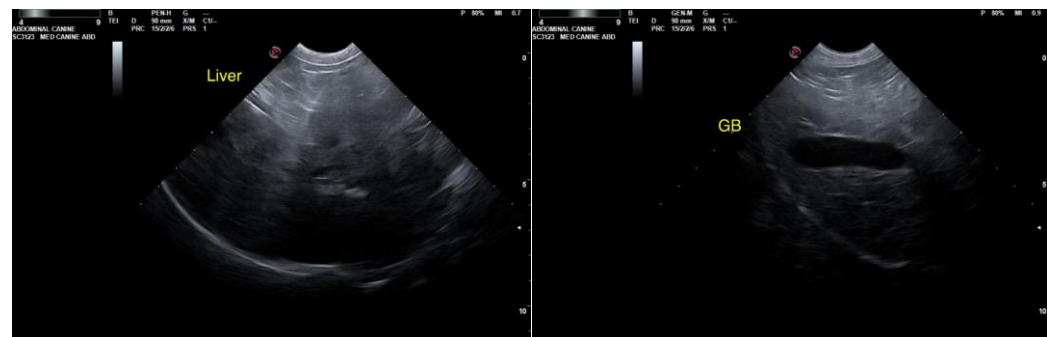
Dr. Puthoff

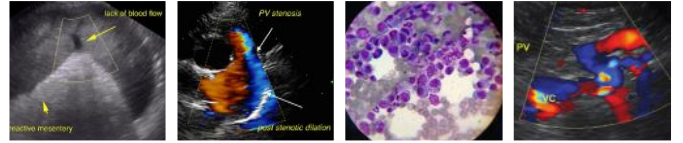
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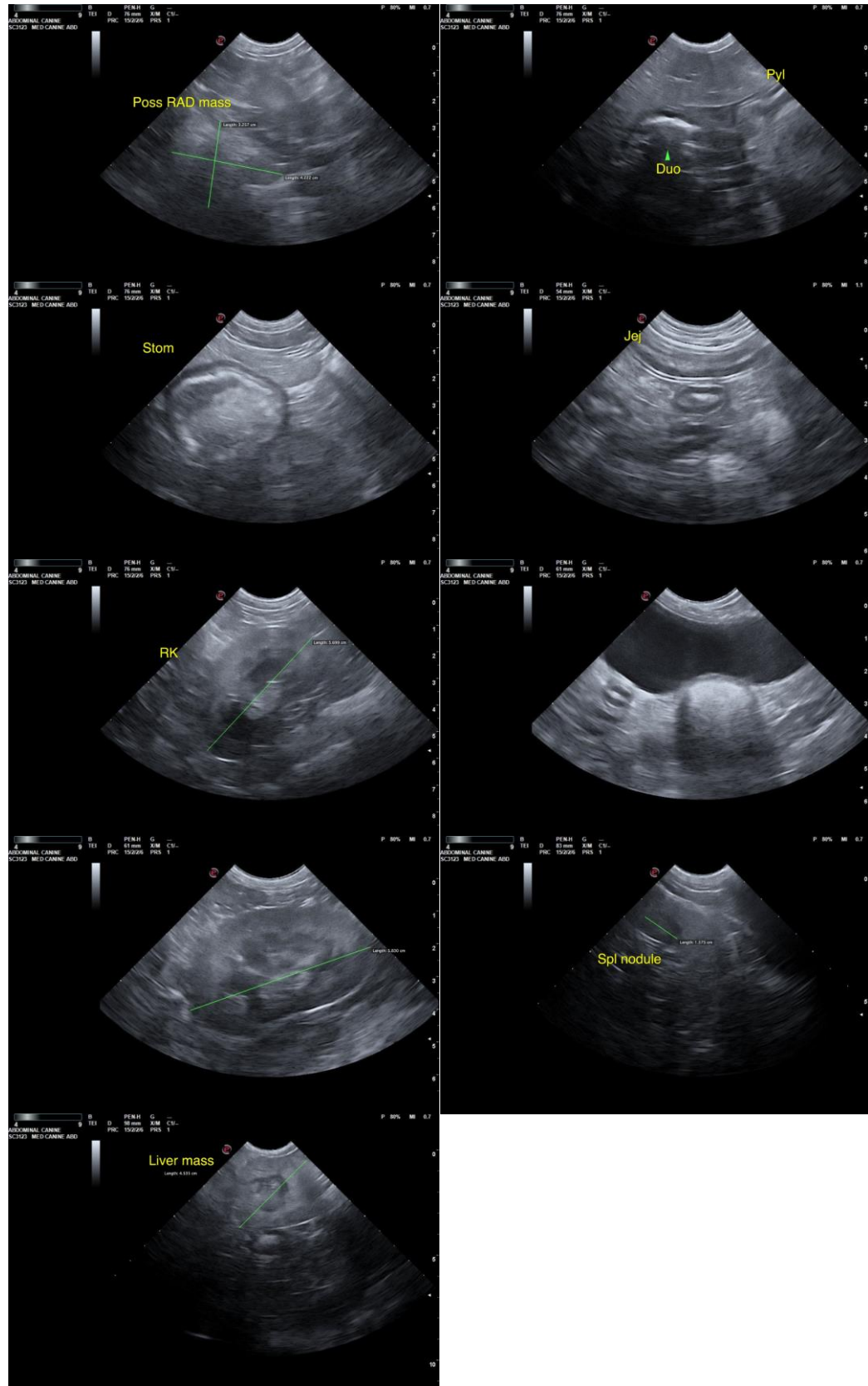
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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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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mac.daniel@sonopath.com

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