



PATIENT PRESENTING CLINICAL SIGNS

Buddy Emminger

Clinical Exam Findings: Severe abdominal distension/hepatomegaly PU/PD Hx of atopic dermatitis recent history of acute colitis Obese Periodontal disease Canine cognitive dysfunction
Abnormal PE/Chem/CBC/UA Results: labs pending historical elevated ALP and creatinine

SPECIES

Canine

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

BREED

Terrier X

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 were noted.

SEX

Intact Male

The prostate exhibited subjective mild subnormal size compared to expected prostate size for an intact geriatric canine, exhibiting mild non-homogeneous yet non-mineralized parenchyma and measuring 1.2 cm diameter. No evidence of prostatic pathology.

AGE

15 Years

The area of the aortic trifurcation was free of pathology.

WEIGHT

12.8 Pounds

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. No evidence of pelvic dilation was present. Small cortical cysts and non-homogeneous cortex echotexture noted. The left kidney measured 4.7 cm. The right kidney measured 4.5 cm.

INTERPRETED BY

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

Adrenal Glands

The left adrenal gland exhibited generalized enlargement, primarily noted at the caudal pole with non-homogeneous to nodular parenchyma. No evidence of parenchymal escape, overt vascular invasion or parenchymal mineralization. The left adrenal gland measured 3.7 cm length x 1.4 cm at the cranial pole and 1.7 cm at the caudal pole. Example of cranial left adrenal nodule measured 1.3 cm diameter. The distinct cranial left adrenal nodule was uniformly echogenic in appearance.

IMAGING PERFORMED BY

Jenna Walsh

The right adrenal gland was normal in size. Mild parenchyma heterogeneity and mild capsule asymmetry was present without suspicion for overt neoplasia. No overt evidence of right adrenomegaly. The right adrenal gland measured 2.2 cm length x 0.58 cm at the cranial pole and 0.60 cm at the caudal pole.

HOSPITAL NAME

VCA Mckenzie AH

Spleen

The spleen exhibited primarily finely textured and homogenous parenchyma which was hyperechoic to the liver and renal cortical parenchyma. Intermittent, non-expansive echogenic nodules were present throughout the cranial to caudal parenchyma. Example measured 0.35 cm. 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.

REFERRING VET

Dr. Mary Arpaia

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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



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echotexture. Intermittent, well demarcated, uniformly echogenic parenchymal nodules are noted. Example of liver nodule measured 1.8 cm diameter. 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.

Gastrointestinal

The stomach presented wall thickening secondary to echogenic mucosa hypertrophy. Intact wall layering was maintained and distinct. Minor retained anechoic pyloric fluid present. Gastric body wall measured 0.48 cm.

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. Intermittent duodenojejunal mucosal speckling noted. Duodenum wall measured 0.46 cm. Jejunum wall measured 0.48 cm.

The colon walls presented intact yet prominent wall layering with mild thickened to echogenic submucosa. The colon was primarily empty.

Pancreas

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.

ULTRASONOGRAPHIC FINDINGS

- Bilateral chronic renal changes with small cortical cyst
- Hepatomegaly with intermittent echogenic parenchymal nodules – these nodules are likely consistent with areas of nodular hyperplasia or lipogranulomas. Benign hepatopathy (steroid, vacuolar or inflammatory hepatopathy) is likely. Hepatic neoplasia is considered an unlikely differential diagnosis.
- Mild gallbladder debris (non-mucocele)
- Nodular left adrenomegaly – hyperplasia, adenomatous change, or neoplasia possible. Left adrenal neoplasia favored (cortisol secreting tumor, adenocarcinoma, pheochromocytoma or other).
- Mild gastroenterocolitis pattern – potentially resolving

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Full adrenal workup including LDDST is recommended. Assessment of systemic blood pressure for evidence of hypertension suggested. Urine culture and sensitivity on sterile urine sample may be considered to rule out underlying infection if clinically indicated.



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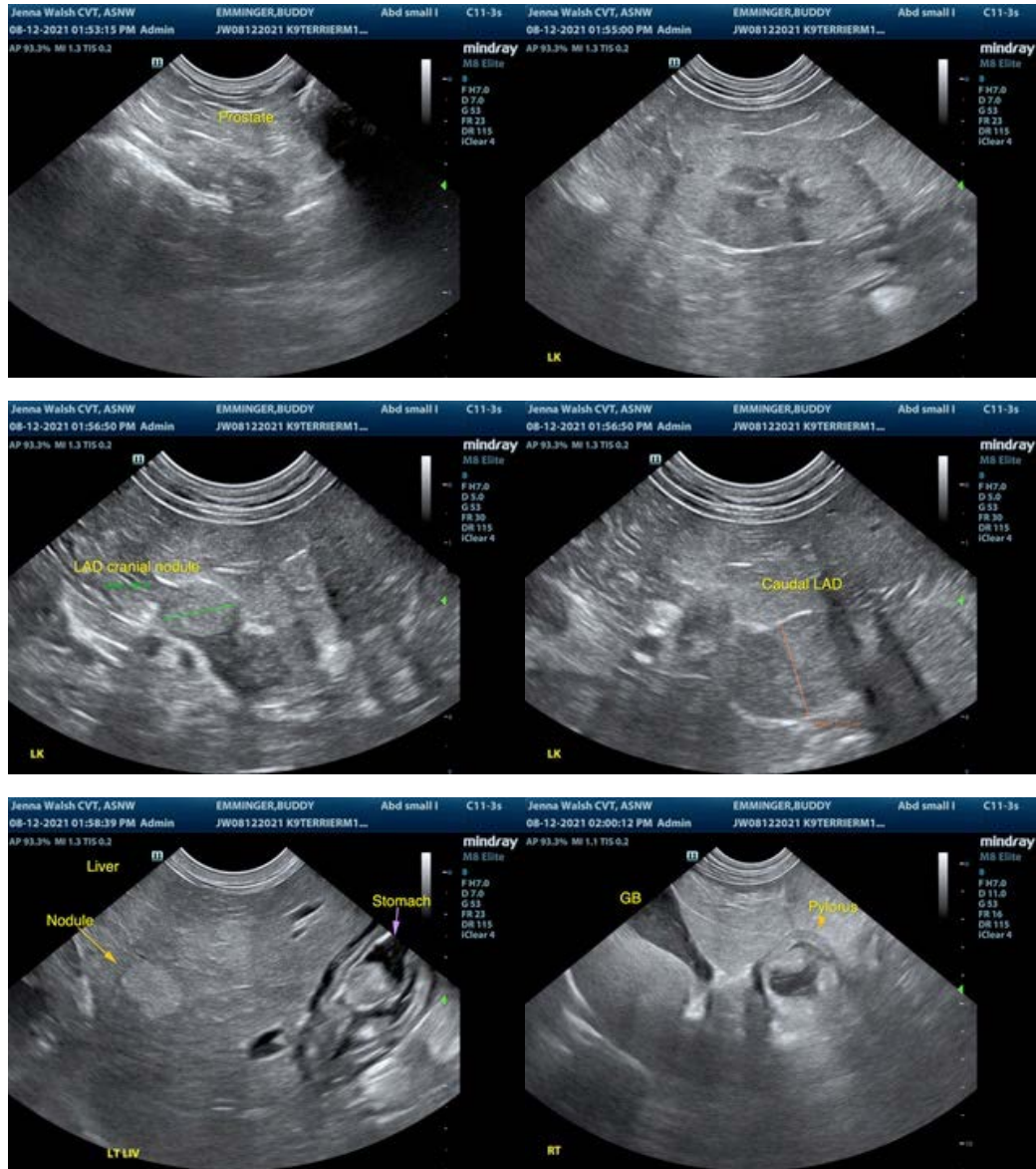
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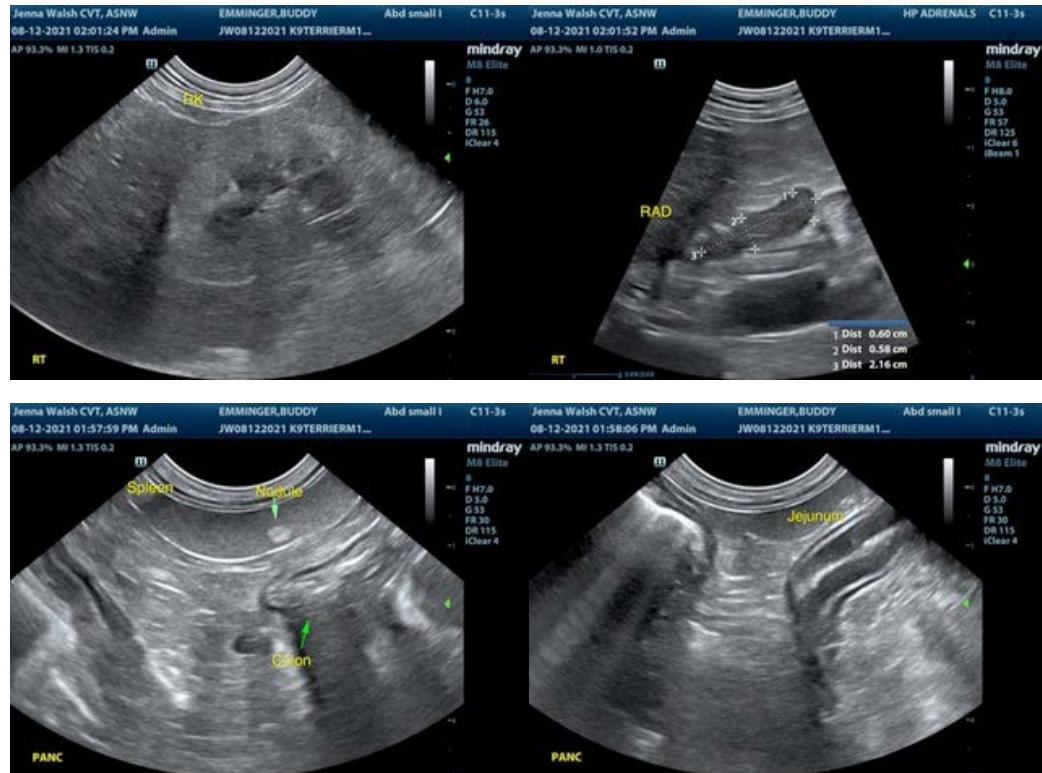
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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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