



PATIENT

Clark Holland

PRESENTING CLINICAL SIGNS

History: Recent episodes of poor appetite, gastritis. Grade I/VI heart murmur, coughing, panting. Prev. hx of DCM 2021. Prev. dbl cav u/s 5/2022 (attached). Meds: Started Lasix 8/15 pm; Gabapentin. Abnormal PE/Chem/CBC/UA Results: ALP 1565, USG 1.022

SPECIES

Canine

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

BREED

Mix

The **urinary bladder**, trigone, and pelvic urethra presented normal thicknesses and normal tone. The ureters were not visible which is normal. No uroliths or sediment were visualized and anechoic urine was present. No evidence of inflammatory or neoplastic changes was noted. Ureteral papillae were normal.

SEX

Neutered male

The residual prostate measured 0.74 cm.

AGE

13.5 years

The **kidneys** revealed largely normal size and structure, corticomedullary definition and ratio (cortex 1/3 of medulla) were essentially maintained with some age-related loss of curvilinear patterns regarding the capsule and C/M junction. The cortices presented largely uniform texture with some increased echogenicity expected for his age patient. Medullary structure differed distinctly from that of the cortex and no evidence of pelvic dilation was present. Calculus was noted in the kidneys noted at the caudal aspect of the left kidney at the corticomedullary junction. The right kidney measured 5.7 cm. The left kidney measured 6.22 cm.

WEIGHT

78 lbs

Adrenal Glands

INTERPRETED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

The **adrenal glands** appeared slightly enlarged and swollen. No evidence of focal capsular expansion or invasion into the phrenic veins was noted. No overt suspicion of neoplasia was noted. This is considered likely a hyperplastic change associated with stress or adrenal endocrinopathy (PDH). If isosthenuria is persistently present and the patient morphologically suggests Cushing's disease then ACTH testing would be indicated. Heterogenous nodular changes were noted in the right adrenal gland. The right adrenal gland measured 3.04 x 1.36 cm at the cranial pole and 0.71 cm at the caudal pole. The left adrenal gland measured 2.76 x 0.93 cm at the cranial pole and 1.12 cm at the caudal pole.

IMAGING PERFORMED BY

Shari Reffi CVT

HOSPITAL NAME

Marsh AH

Spleen

REFERRING VET

Dr. Milwicki

The **spleen** was largely smooth with subtle heterogeneous parenchymal changes while maintaining normal echogenic relationship to the liver and kidney. A focal, non-disruptive, hypoechoic nodule was noted and measured 0.73 cm with hyperechoic lipid plaques that measured 0.62 cm. These changes are consistent with normal age-related alteration. The capsule was smooth without noticeable impingement from within the spleen or from pathology in the adjacent abdomen. The splenic vasculature demonstrated normal volume without signs of congestion or significant contraction. No evidence of active acute or chronic inflammatory, neoplastic, or infarctual changes was noted.

INVOICE

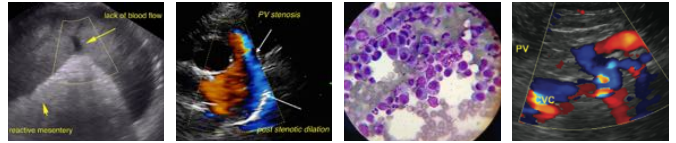
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Liver

DATE

8/17/23

The **liver** images from right and left intercostal as well as subcostal views revealed subjectively normal liver size, contour, and structure. Some age-related parenchymal remodeling was noted but likely not clinically significant at this time. Benign hepatic cysts were noted. Multi-focal, hypoechoic to anechoic



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cysts measuring up to 1.07 cm. Vascular and biliary tracts were of normal volume and no evidence of congestion was noted. Minor gallbladder sand was noted in this patient and was not pathological.

Clark Holland

SPECIES

Gastrointestinal

Canine

Examination of the **gastrointestinal tract** revealed a stomach and intestine free of stasis, of normal wall thickness, acceptable curvilinear mural detail, and peristaltic activity. Small and large intestine demonstrated normal luminal chyme and stool consistency respectively. No obstructive or overt infiltrative disease was noted. No associated abnormal lymphatic activity was noted.

BREED

Mix

Pancreas

SEX

Neutered male

The base and limbs of the **pancreas** were observed to be largely isoechoic to surrounding omental fat. Pancreatic duct and capsular contour were acceptably normal and parenchyma respected normal curvilinear patterns. No overt evidence of active inflammatory or neoplastic disease was noted.

AGE

13.5 years

Heart

Rapid view of the heart revealed no evidence of pathology.

WEIGHT

78 lbs

ULTRASONOGRAPHIC FINDINGS

Bilateral adrenal hypertrophy/hyperplasia.

Nodular hyperplasia of the spleen and liver.

Benign hepatic cysts.

Age related renal changes with non-obstructive nephrolithiasis.

Gallbladder sand.

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DABVP, Cert. IVUSS

IMAGING PERFORMED BY

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INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

If the patient appears Cushingoid then work-up for PDH is indicated. The gastrointestinal tract was unremarkable. The poor appetite is likely owing to cardiac disease. Full CNS examination is warranted to assess for occult CNS signs. Given the bilateral adrenal hypertrophy an expansive, pituitary tumor is a potential. Skull CT with contrast is warranted if clinical signs of expansive pituitary are present. Blood pressure measurements and eventual work-up for PDH is indicated if urine specific gravity is less than 1.020.

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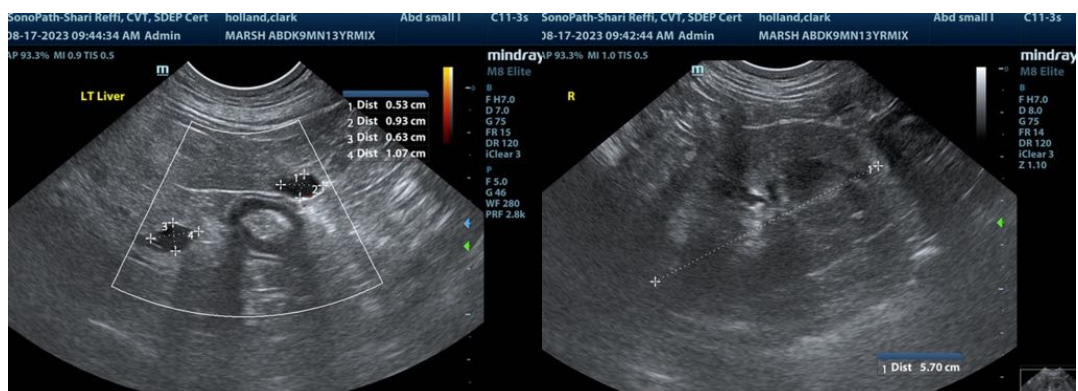
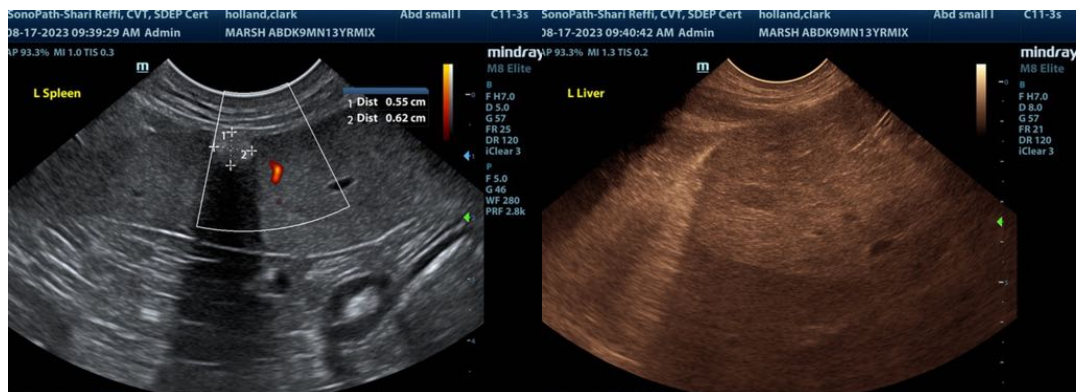
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

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