



**PATIENT**

Zach Daugherty

**SPECIES**

Canine

**BREED**

Morkie

**SEX**

Neutered male

**AGE**

10 years

**WEIGHT**

8.2 lbs

**INTERPRETED BY**

Eric Lindquist, DMV  
DABVP, Cert. IVUSS

**IMAGING PERFORMED BY**

Melissa Pascucci

**HOSPITAL NAME**

American AH

**REFERRING VET**

Dr. Vogel

**INVOICE**

32077

**DATE**

7/29/22

**PRESENTING CLINICAL SIGNS**

History: Weight loss (3lbs since last year) but eating well, more frequent BMs, elevated liver enzymes, hypoalbuminemia, proteinuria

Abnormal PE/Chem/CBC/UA Results: ALP 871, ALT 387, Alb 2.1, TP 4.4, USG 1.048, pro 2+

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**Urinary System**

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.

The **kidneys** revealed normal size and structure, corticomedullary definition and ratio for this age. The cortices presented largely uniform texture with normal echogenic relationship to liver and spleen. Medullary structure differed distinctly from the cortex and no evidence of pelvic dilation was present. The capsules were acceptably uniform without significant irregularities. The left kidney measured 4.0 cm. The right kidney measured 3.5 cm.

**Adrenal Glands**

The left adrenal gland was visualized obliquely and measured 0.5 cm and slightly irregular. The right adrenal gland was visualized obliquely and measured 0.6 cm.

**Spleen**

The **spleen** presented a smooth homogeneous parenchyma hyperechoic to liver and renal cortical parenchyma. The capsule was smooth without noticeable expansion or deviation from within the spleen or adjacent pathology. The splenic vasculature demonstrated normal volume without signs of congestion or thrombosis. No sonographic evidence of acute or chronic inflammatory, neoplastic, or infarctual changes was noted.

**Liver**

The **liver** was uniformly swollen with minor, excessive gallbladder debris and over distension with dependent and suspended bile without evidence of overt mucocele formation. However, excessive sludge was present. The liver presented coarse architecture with mildly increased portal markings and subtle, mixed echogenic changes. This is consistent with vacuolar hepatopathy and some level of remodeling and history of inflammatory component. There was no overt suspicion of neoplasia.

**Gastrointestinal**



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The **gastrointestinal tract** revealed submucosal echogenicity and thickness. There were areas of muscularis hypertrophy noted. There was no evidence of foreign bodies. The pylorus was mildly thickened. Minor retention of ingesta was noted in the stomach.

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***Pancreas***

The base and limbs of the **pancreas** were observed to be largely isoechoic to surrounding omental fat. Some parenchymal remodeling, however, with mild deviation from curvilinear normalcy was observed. Pancreatic duct and capsular irregularities were present consistent with age related changes. If pain upon imaging (+ Murphy sign) was present or if the patient is focally painful in subxiphoid palpation then low-grade smoldering chronic pancreatitis should be suspected.

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**ULTRASONOGRAPHIC FINDINGS**

Chronic GI changes.

**AGE**

10 years

Age related changes.

**WEIGHT**

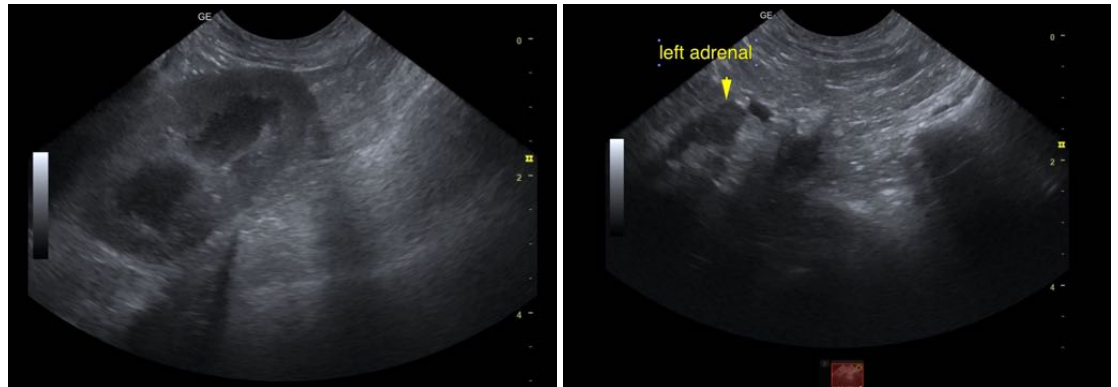
8.2 lbs

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

There was no overt evidence of neoplasia. Malassimilation of nutrients may be an issue.

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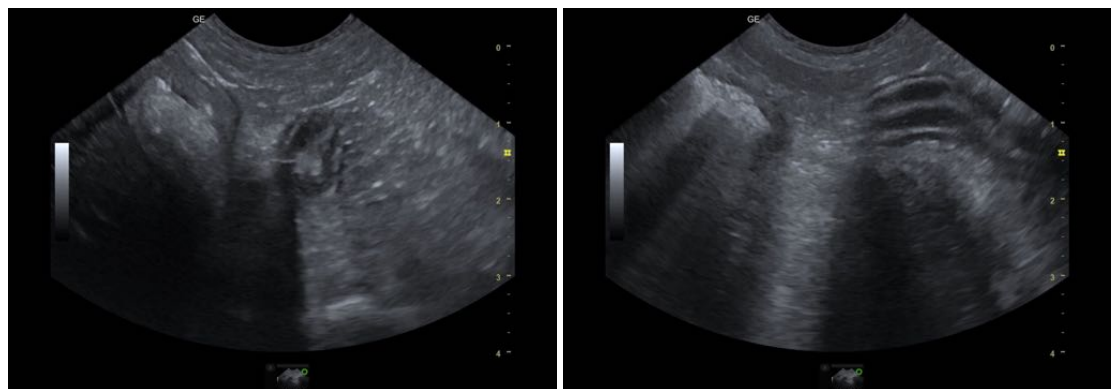


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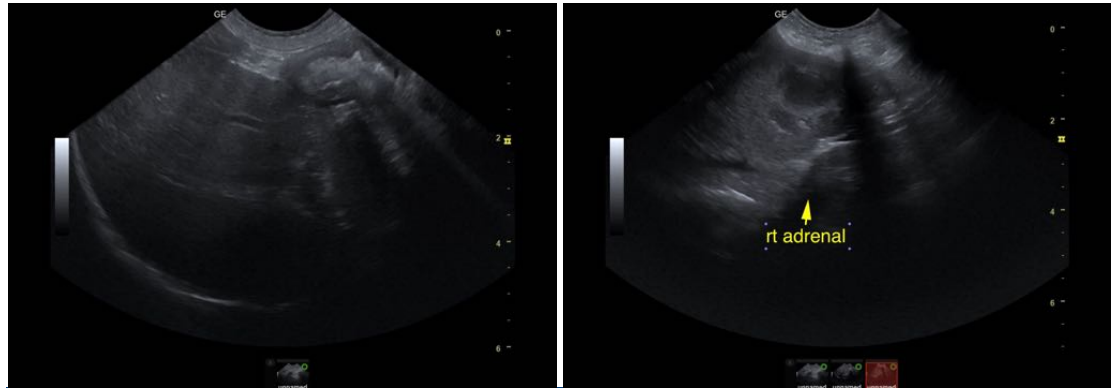
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

**Eric Lindquist**, DMV, DABVP, Cert. IVUSS, CEO of SonoPath.com  
info@SonoPath.com