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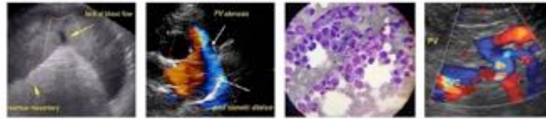


THE FOCAL ZONE
IMAGING PERFORMED BY
289-808-2608 info@thefocalzone.com

**PATIENT**

Riley Lawrie Ruttman

**SPECIES**

Canine

**BREED**

Pug Cross

**SEX**

Neutered male

**AGE**

12 years

**WEIGHT**

42 lbs

**INTERPRETED BY**

Eric Lindquist, DMV DABVP, Cert. IVUSS

**IMAGING PERFORMED BY**

Kelly Reshny, RVT

**HOSPITAL NAME**

Gagemount AH

**REFERRING VET**

Dr. Keir

**INVOICE**

91534

**DATE**

8/26/21

## PRESENTING CLINICAL SIGNS

History: Muscle wasting/atrophy, ambulatory, DJD in hind with some mobility issues Recently at EVC for bloody diarrhea History of elevated liver enzymes, increased SDMA Fortiflora daily, Hepatosupport daily, Gastro diet Any issues causing the bloody diarrhea or colitis from eating unknown ( owner thinks may have eaten underwear at some point ) Any signs of liver neoplasia
Abnormal PE/Chem/CBC/UA Results: Please see attached labs.

## 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. A 1.0 cm pelvic calculus was noted in the left kidney and was non-obstructive. 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 5.77 cm with cortical cysts, pyelectasia and corticomedullary mineralization/medullary rim sign. The right kidney measured 6.7 cm with slight mineralization and mild degenerative changes.

### *Adrenal Glands*

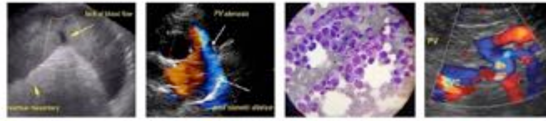
The right **adrenal gland** was uniform measured 1.77 x 1.05 cm at the cranial pole and 0.87 cm at the caudal pole. The left adrenal gland was slightly irregular measuring 2.09 x 1.07 cm at the caudal pole and 0.95 cm at the cranial pole.

### *Spleen*

The **spleen** was hypoechoic, irregular and nodular with regional infiltrative pattern. Enhanced surrounding mesentery was noted. There is a potential for splenitis or splenic necrosis.

### *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. There is a potential for micrometastasis.





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### *Gastrointestinal*

The **stomach** revealed shadowing material measuring up to 2.0 cm in width. The small intestine and colon were unremarkable.

### *Pancreas*

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.

## ULTRASONOGRAPHIC FINDINGS

Infiltrative splenic pattern, possibility of non-neoplastic splenitis or necrosis.

Nephrolithiasis. Concurrent nephrolithiasis, moderate degenerative renal changes.

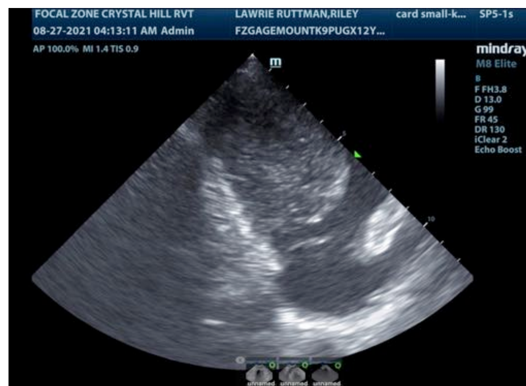
Bilateral adrenal hypertrophy with minor, irregular contour.

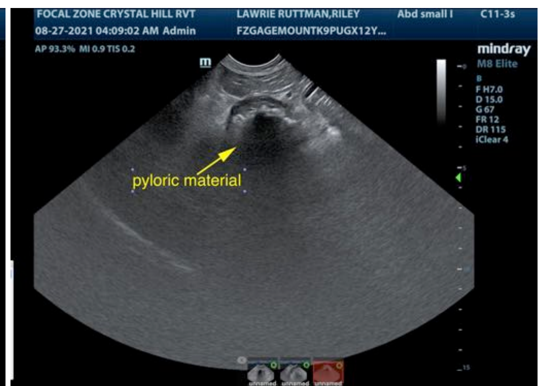
Subjectively benign vacuolar hepatopathy liver pattern with some remodeling. There is a mild potential for underlying metastasis.

Gastric pyloric material. Grass or similar is suspected.

## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

I recommend screening FNA of the spleen and liver in this patient. If the pathology is localized to the spleen then splenectomy +/- gastrotomy could be considered. The prognosis is guarded long term.



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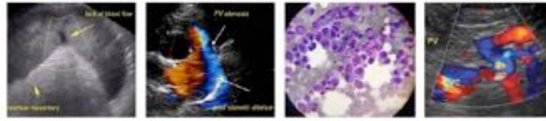

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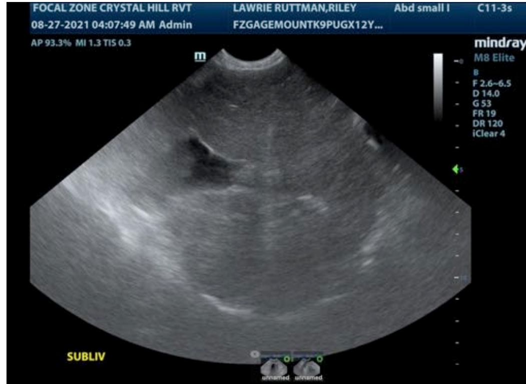


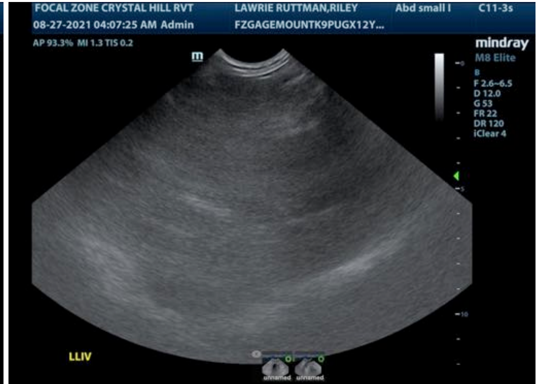


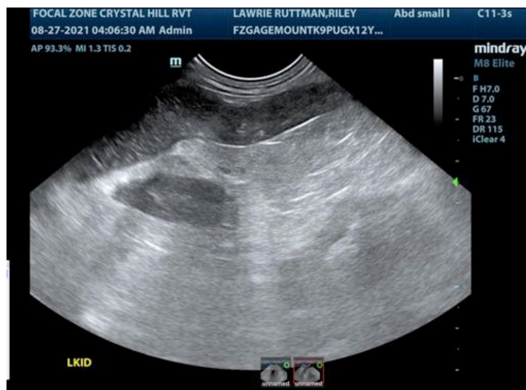


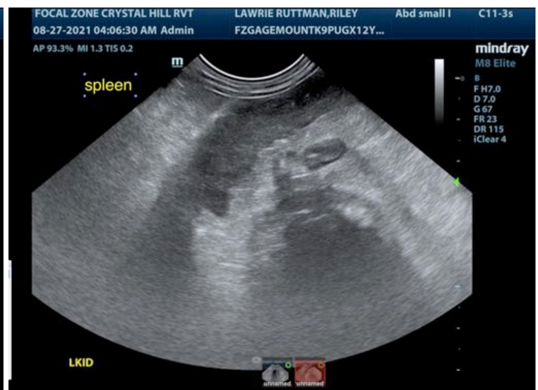


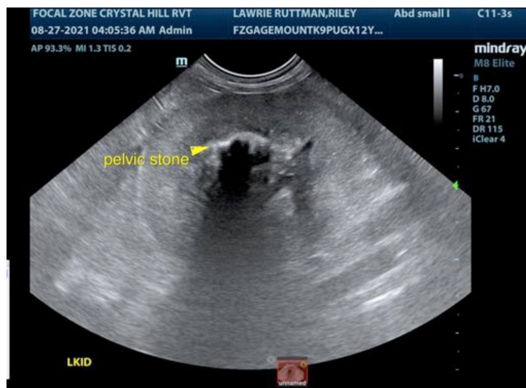


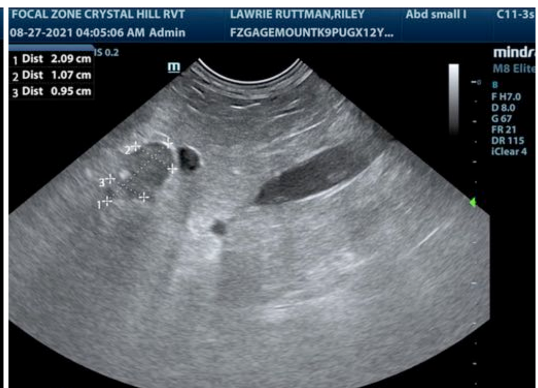


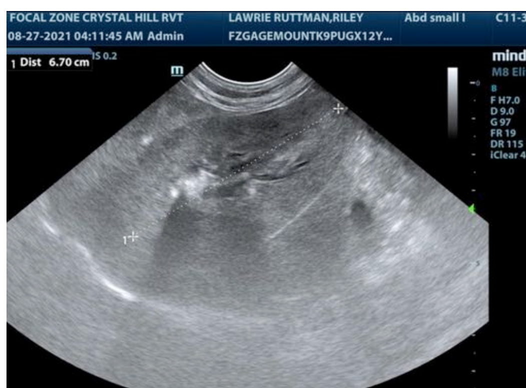


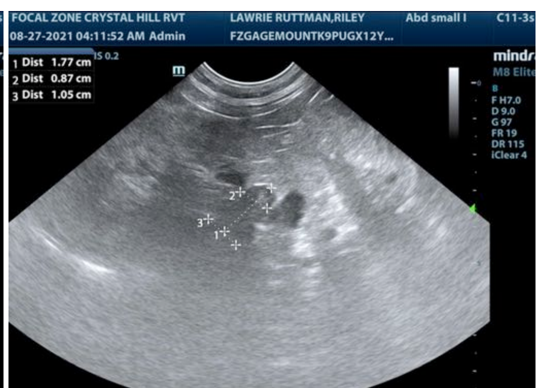

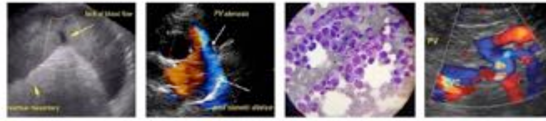



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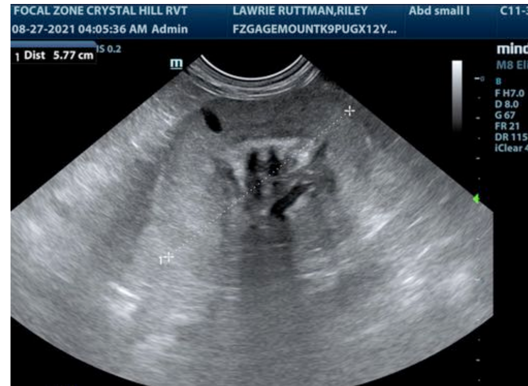


**The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.**

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.

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