



## PATIENT PRESENTING CLINICAL SIGNS

Maggie Gannon

History: seizure last week elevated liver enzymes Current meds Galliprant

## ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

### SPECIES *Urinary System*

Canine

The **urinary bladder** wall is normal in thickness and the mucosal surface is smooth. The bladder lumen is moderately distended with anechoic urine. No masses, inflammatory changes or calculi are observed. Ureteral papillae and visualized portion of the proximal urethra, visible to a depth of 2 cm, are normal.

### BREED

Retriever Mix

The **left kidney** is normal size (5.64 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

### SEX

Spayed Female

The **right kidney** is normal size (5.51 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

### AGE

11 years

#### *Adrenal Glands*

The **left adrenal gland** is normal size (0.69 cm at cranial pole) (0.58 cm at caudal pole) (2.39 cm in length); normal shape; homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

### WEIGHT

67 lbs

The **right adrenal gland** is normal size (1.01 cm at cranial pole) (0.56 cm at caudal pole); normal shape; homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

## INTERPRETED BY

Andrea Nicastro,  
DVM, Diplomate  
ACVIM (*Small Animal  
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### *Spleen*

The **spleen** is normal in size (1.64 cm in width at the level of the hilus) with a normal capsular contour. There is appropriate echogenicity and echotexture. No focal lesions are observed. Splenic vasculature is normal.

## IMAGING PERFORMED BY

Jenn

### *Liver*

The **liver** is subjectively prominent in size with normal curvilinear peripheral contours. The parenchyma is isoechoic relative to the spleen with a coarse echotexture and homogenous parenchyma. No distinct focal lesions are observed. Hepatic vasculature and intrahepatic biliary tracts are of normal volume with no evidence of congestion.

## HOSPITAL NAME

Rockaway AH

The **gall bladder** lumen is moderately distended. The wall is thin and smooth. A small amount of gravity dependent debris is observed within the lumen. The cystic and common bile ducts are normal/not seen.

### *Gastrointestinal*

## REFERRING VET

Dr. Gannon

The **gastric lumen** is moderately distended with ingesta and soft, shadowing material. The gastric is normal in thickness with a normal layering pattern. The small intestinal lumen is not dilated. The small intestinal wall thickness is normal with a normal layering pattern and appropriate mural detail. Discreet masses are not identified. The colonic wall is normal. There is no evidence of an obstructive pattern.

## INVOICE

11600

### *Pancreas*

A portion of the **pancreas** is obscured by the gastric distention. In the visualized portions, no obvious abnormalities are seen.

## DATE

9.8.22

### Free Abdomen

The peritoneal cavity is normal. There is no evidence of inflammation or effusion. The abdominal lymph nodes are normal/not visible.

## ULTRASONOGRAPHIC FINDINGS

### Primary Findings

- Nonspecific diffuse hepatopathy. Differentials could include inflammatory disease (i.e., chronic active hepatitis, bacterial cholangiohepatitis), hepatotoxicosis, infiltrative neoplasia (less likely), and/or benign change (i.e., age-related remodeling, vacuolar hepatopathy, regenerative nodular hyperplasia). Correlation with the patient's liver values is recommended.

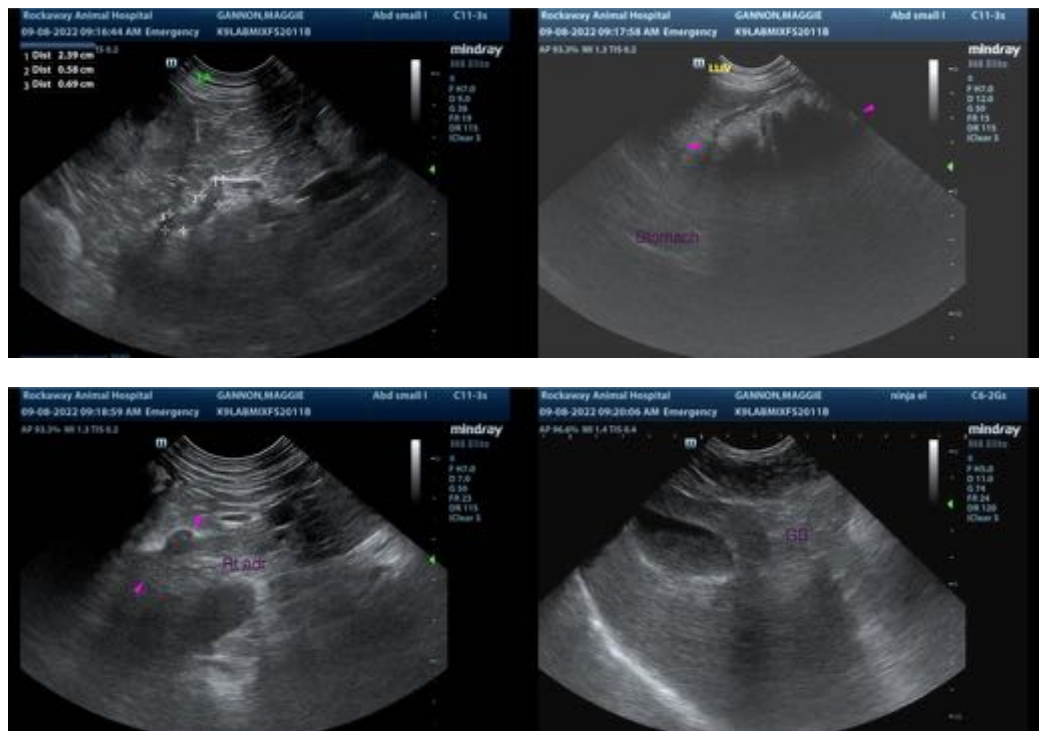
### Secondary Findings

- The soft, shadowing material in the gastric lumen may represent normal ingesta and/or foreign material (i.e., grass).

## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Given the recent history of seizures, and the elevated liver values, consider pre-and postprandial serum bile acids, +/- a blood ammonia level to assess for hepatic encephalopathy. Also consider a baseline blood pressure measurement to assess for systemic hypertension as a cause of seizures. A T4/free T4 by equilibrium dialysis should also be considered.

If the blood results are inconclusive, consider referral to a board-certified neurologist for further work-up (i.e., brain MRI +/- CSF tap).





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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