


**PATIENT PRESENTING CLINICAL SIGNS**

Daisy Mosley Patient presented on Wednesday due to hardly eating for 3-4 days (couple of bites) and bloody diarrhea for 5 days. Patient has vomited foamy bile twice in the past 5 days. Owner asked for stat US. Abd. X-ray showed nothing extraordinary.

**SPECIES** Abnormal PE/Chem/CBC/UA Results: WBC 17.38. NEU 14.54. RBC 4.96. HGB 10.6. HCT 32.61.K+ 6.8

Canine

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**
**BREED** *Urinary System*

Maltese Mix

The urinary bladder, trigone, and pelvic urethra are normal in thickness and the mucosal surface is smooth. The bladder lumen is moderately distended with anechoic urine. The region of the trigone is normal.

**SEX**

Spayed Female

The left kidney is normal size (3.83 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal to mild loss of corticomedullary distinction. Hyperechoic shadowing diverticular foci are visualized. Mild pyelectasia is present (0.24 cm in the longitudinal plane). There is no evidence of infarcts or hydroureter.

**AGE**

18 years

The right kidney is normal size (4.16 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal to mild loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter.

**WEIGHT**

12 lbs

**Adrenal Glands**

The caudal pole of the left adrenal gland is visualized and is small in size (0.26 cm in width) with a normal shape, glandular echogenicity and detail. Surrounding vasculature are normal.

**INTERPRETED BY**

Andrea Nicastro,  
DVM, Diplomate  
ACVIM (*Small Animal  
Internal Medicine*)

The caudal pole of the right adrenal gland is visualized and is small in size (0.32 cm in width) with a normal shape, glandular echogenicity and detail. Surrounding vasculature are normal.

**Spleen**
**IMAGING PERFORMED BY**

James Hornbuckle

The spleen is normal in size (0.93 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.

**Liver**
**HOSPITAL NAME**

Golden Isles AH

The liver is subjectively prominent in size with irregular peripheral contours, particularly at the caudal aspect. The parenchyma is isoechoic relative to the spleen and mildly heterogenous in appearance. A 1.29 cm irregular, hyperechoic nodule is observed on the left side. Hepatic vasculature and intrahepatic biliary tracts are of normal volume with no evidence of congestion.

**REFERRING VET**

Dr. James  
Hornbuckle

The gall bladder lumen is moderately distended. The wall is thin and smooth. Luminal contents are mostly anechoic. The cystic and common bile ducts are normal/not seen.

**Gastrointestinal**
**INVOICE**

11105

The stomach and intestine are free of stasis and exhibit normal peristaltic activity. The gastric lumen is not distended. The gastric wall and pylorus are normal in thickness with a normal layering pattern. The pyloric outflow tract is patent. The small intestinal lumen is not dilated. The small intestinal wall thickness is

**DATE**

6/17/22

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.

### ***Pancreas***

The right limb of the pancreas is visible with normal curvilinear peripheral contours. The parenchyma is largely isoechoic relative to surrounding omental fat and slightly mottled in appearance. The pancreatic duct is visible but not overtly dilated. There is no evidence of peripancreatic inflammation or effusion.

### ***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**

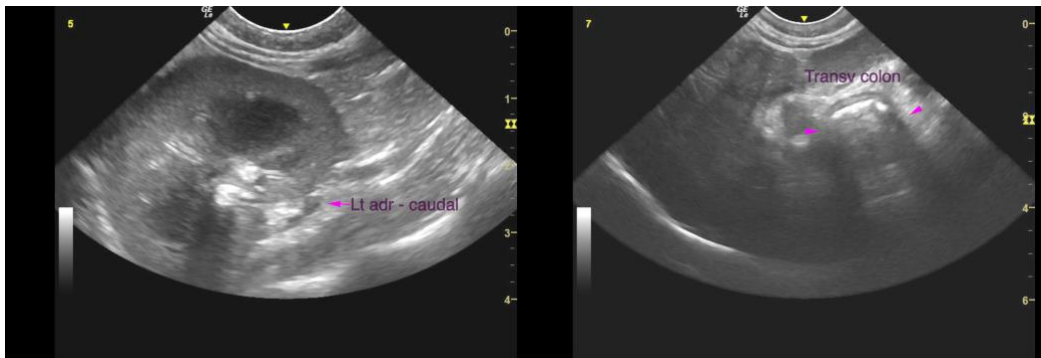
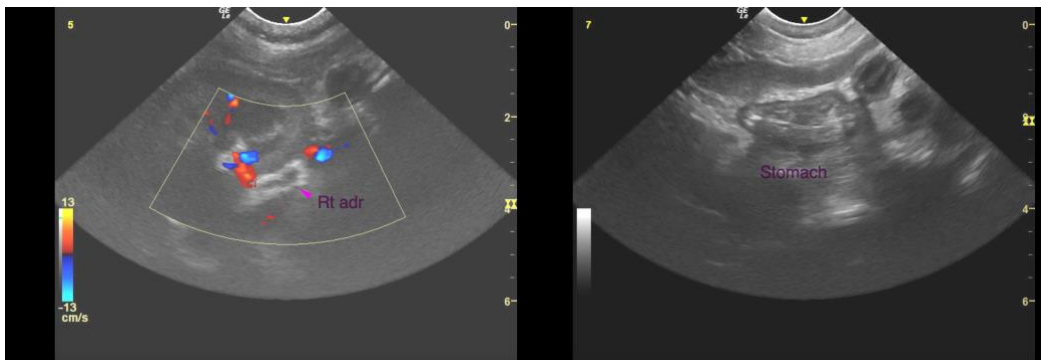
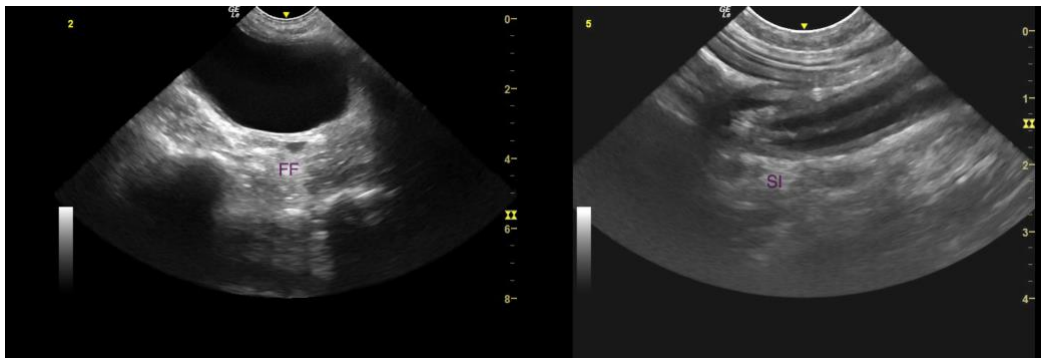
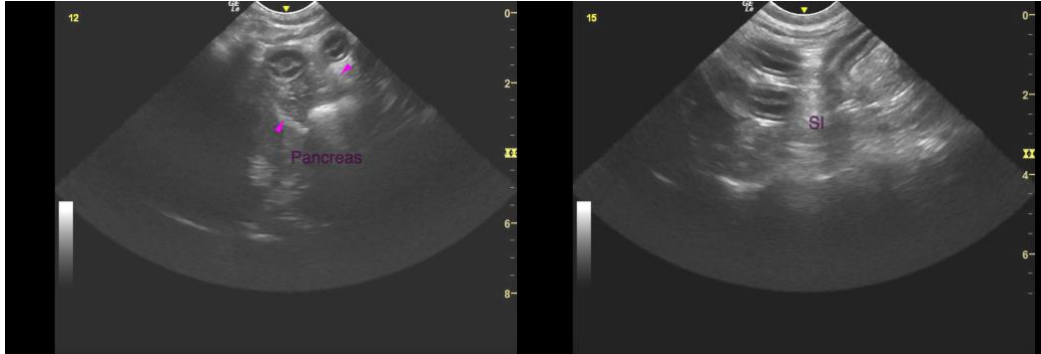
\*An obvious cause for the patient's clinical signs is not identified in this study. Considerations include hemorrhagic gastroenteritis, dietary indiscretion, infectious/parasitic disease, low-grade pancreatitis, underlying metabolic issue, other.

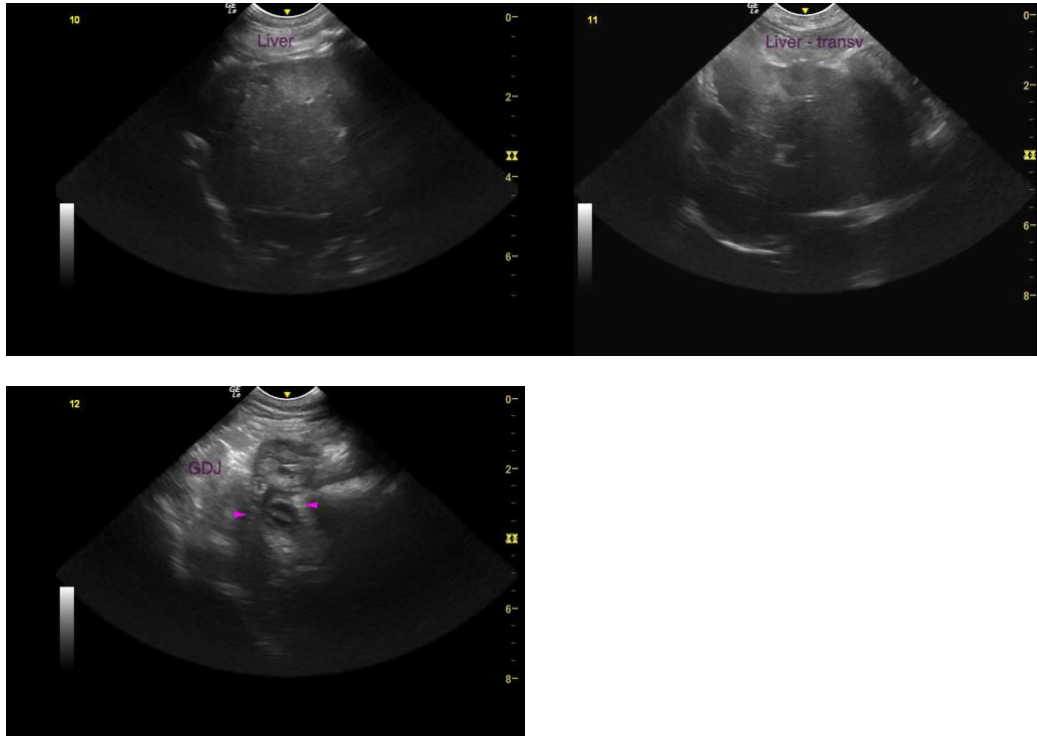
### **Secondary Findings**

- Trace ascites
- Minor, bilateral, age-related renal changes with left pyelectasia and dystrophic mineralization.
- The flattened adrenal glands may be a normal variant or could be consistent with early atrophy (i.e., secondary to hypoadrenocorticism).
- The diffuse hepatic changes are non-specific and could be consistent with vacuolar hepatopathy, regenerative nodular hyperplasia, and/or age-related remodeling. Inflammatory and infiltrative disease are considered less likely. Correlation with the patient's liver values is recommended.
- The pancreatic changes are most consistent with age-related parenchymal remodeling, potentially secondary to a prior inflammatory episode, early fibrosis or chronic pancreatitis.

## **INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

- A fecal evaluation for ova and Giardia
- Consider a fecal PCR infectious disease panel.
- Supportive care for acute hemorrhagic gastroenteritis is recommended, including fluid therapy, gastric protectants, antiemetics, broad-spectrum antibiotics (to prevent bacterial translocation), a probiotic +/- pain medication as needed.
- Given the hyperkalemia and small adrenals, consider a resting cortisol level to assess for hypoadrenocorticism, although this would be an unlikely diagnosis in a patient of this age.
- Also consider thoracic radiographs to assess for occult aspiration pneumonia.





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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