



**PATIENT PRESENTING CLINICAL SIGNS**

**Babie Riley** Presented for acute onset vomiting - owner reported consistent vomiting episodes of mostly liquid/bile over 24 hour period. Recommended hospitalization with further evaluation and workup.

**SPECIES** Hyperglycemia, elevated lipase/amylase noted on bloodwork. Concern for a fabric pattern in proximal duodenum. Hyperglycemia has resolved with supportive care. Concern for acute pancreatitis, possible foreign body.

**Canine** Abnormal PE/Chem/CBC/UA Results: Glucose 417 (74 - 143) mg/dL Bilirubin - Total 1.2 (0.0 - 0.9) mg/dL Cholesterol 351 (110 - 320) mg/dL Amylase 2,123 (500 - 1,500) U/L Lipase >6,000 (200 - 1,800) U/L Possible fabric pattern in proximal duodenum on radiographs

**BREED**

Rottweiler

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**Urinary System**

**SEX** The urinary bladder is moderately distended with anechoic contents. No masses, inflammatory changes, echogenic sediment or cystoliths are observed. The urinary bladder, trigone and visible pelvic urethra are normal in thickness with a smooth mucosal surface.

**AGE**

6 Years

The right kidney is normal in size (8.5 cm) and shape with smooth peripheral margination. A normal 1:3 cortex to medulla ratio is maintained. The medulla and cortices are uniform in texture with some mild increased echogenicity and mild loss of corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed.

**WEIGHT**

116 Pounds

The left kidney is normal in size (7.7 cm) and shape with smooth peripheral margination. A normal 1:3 cortex to medulla ratio is maintained. The medulla and cortices are uniform in texture with some mild increased echogenicity and mild loss of corticomedullary distinction. There is no evidence of mineral or infarcts observed. Renal pelvis is dilated (pyelectasia), measuring (0.55 cm in the transverse view). No visible obstruction is observed, but cannot be ruled out.

**INTERPRETED BY**

Beth Johnson, DVM  
DACVIM

**Adrenal Glands**

The right adrenal gland is normal in size (3.2 cm long x 1.4 cm at the cranial pole and 0.74 cm at the caudal pole), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

**IMAGING PERFORMED BY**

Jack Reese

The left adrenal gland is normal in size (3.6 cm long x 0.44 cm at the cranial pole and 0.39 cm at the caudal pole), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

**HOSPITAL NAME**

Willow Run VC

**Spleen**

The spleen is subjectively normal in size with a normal smooth capsular contour. Parenchyma is appropriately finely textured and homogenous with normal echogenicity relative to surrounding tissue (hyperechoic to liver). No focal nodules or masses are observed. Splenic vasculature appears normal.

**REFERRING VET**

Dr. Gwenna Brubaker

**Liver**

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The liver is subjectively normal in size with normal smooth curvilinear peripheral contour. Parenchyma is appropriately hypoechoic to the spleen in echogenicity and appropriately mildly coarse and homogenous in echotexture. No focal lesions are observed. Visible vasculature and biliary tree appear normal without distension or congestion.

**DATE**

4/21/22

The gallbladder is non-distended in size. The wall is smooth without visible thickening. Luminal contents are primarily anechoic. There is no evidence of cystic or common bile duct dilation.



**PATIENT**

***Gastrointestinal***

Babie Riley

The stomach is moderately to markedly fluid distended with echogenic content throughout the fluid, both suspended and gravity dependent.

**SPECIES**

Canine

The visible small intestines are normal in wall thickness and layering (canine duodenum < 0.5 cm and feline duodenum < 0.4 cm; other < 0.3 cm). Small intestinal motility appears adequate (1-3 contractions per min). The lumen of the small intestine is empty except for the proximal small bowel, which is mildly fluid and chyme distended.

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The visible colon is normal in wall thickness (< 0.2 cm) and layering. Contents are consistent with normal formed feces and gas.

***Pancreas***

**SEX**

Spayed Female

The pancreatic parenchyma is appropriately isoechoic to surrounding tissue. Visible capsule is smooth and normal in contour. There is no visible pancreatic duct dilation. There is no evidence of active peripancreatic inflammation.

**AGE**

6 Years

***Free Abdomen***

There is no evidence of peritoneal effusion. There is no apparent lymphadenopathy.

**ULTRASONOGRAPHIC FINDINGS**

**WEIGHT**

116 Pounds

- Moderately to markedly fluid distended stomach and fluid distended proximal duodenum, both of which contain echogenic contents – consistent with either chyme and normal ingesta versus fluid absorbing foreign material. No obvious foreign body and/or small bowel plication is appreciated in these images. However, the dilated proximal bowel followed by normal bowel is an obstructive pattern, and at least a partial obstruction should be high on the list of differentials.

**INTERPRETED BY**

Beth Johnson, DVM  
DACVIM

- Age related kidney change – This finding is expected/consistent with age-related mild degenerative disease and should be interpreted clinically in combination with laboratory changes.

**IMAGING PERFORMED BY**

Jack Reese

- Left kidney pyelectasia - Differentials for left kidney pyelectasia include pyelonephritis, diuresis, congenital malformation or ureteral or lower urinary tract obstruction.

**HOSPITAL NAME**

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**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

Recommendations include a urinalysis with follow up urine culture if indicated based on urinalysis results, given the pyelectasia. Given the obstructive pattern in the stomach and proximal duodenum, but lack of plication or visible foreign material, therapeutic options include either conservative management with supportive care, rehydration, antiemetics, etc. with follow up abdominal imaging if clinical signs persist, or a more aggressive exploratory laparotomy to rule out and/or remove proximal small bowel foreign body, and/or obtain gastrointestinal biopsies if there is no foreign material present.

**REFERRING VET**

Dr. Gwenna Brubaker

Pancreatitis can be clinically present without visible ultrasound changes. Therefore, if a conservative approach is elected, a PLI is recommended for further assessment of the pancreas. A gastrointestinal malabsorption panel including cobalamin, folate, TLI and PLI to Texas A&M GI laboratory could be considered as the means for obtaining the PLI to further assess the gastrointestinal tract as well.

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**PATIENT**

Babie Riley

**SPECIES**

Canine

**BREED**

Rottweiler

**SEX**

Spayed Female

**AGE**

6 Years

**WEIGHT**

116 Pounds

**INTERPRETED BY**

Beth Johnson, DVM  
DACVIM

**IMAGING PERFORMED BY**

Jack Reese

**HOSPITAL NAME**

Willow Run VC

**REFERRING VET**

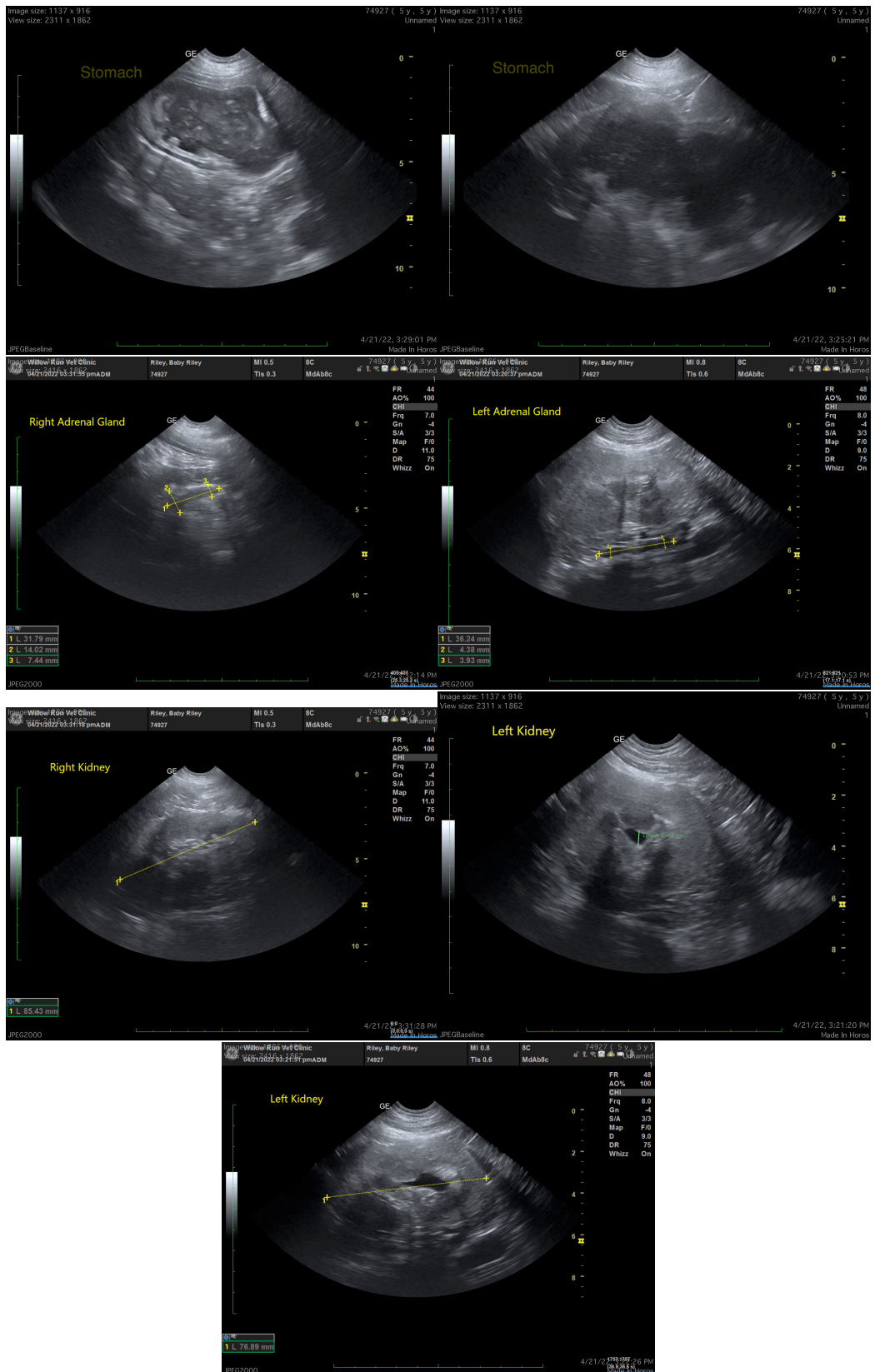
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**PATIENT**

Babie Riley

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.

**SPECIES**

Canine

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.

**BREED**

Rottweiler

**Beth Johnson, DVM, DACVIM**  
Beth.Johnson@sonopath.com

**SEX**

Spayed Female

**AGE**

6 Years

**WEIGHT**

116 Pounds

**INTERPRETED BY**

Beth Johnson, DVM  
DACVIM

**IMAGING PERFORMED BY**

Jack Reese

**HOSPITAL NAME**

Willow Run VC

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