

**PATIENT PRESENTING CLINICAL SIGNS**

Molly Anthony Diarrhea, pancreatitis  
ALP 177, Na/K ratio 28, TLI 43.8, Folate >24

**SPECIES ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

Canine **Urinary System**

**BREED** The urinary bladder was subnormal in size owing to a lack of urine distention. Mild anechoic fluid was present in the urinary bladder without sediment or calculi. Full evaluation of the urinary bladder walls was prohibited owing to lack of urine distention. No evidence of urinary bladder tumors was noted. The urethra exhibited normal structure and tone to a depth of 2.0 cm.

**SEX** The area of the aortic trifurcation was free of pathology.

FS  
**AGE** Normal size and margination were present in the kidneys. A normal 1:3 cortex / medulla ratio was maintained with minor loss of corticomedullary border demarcation. The echogenicity of the cortex was similar to or slightly less than normal liver parenchyma while the medulla echogenicity was hypoechoic to the cortex with no evidence of pelvic dilation. The left kidney measured 3.9 cm in length. The right kidney measured 3.5 cm in length.

**WEIGHT Adrenal Glands**

15.6 The left adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 1.3 cm length x 0.36 cm width at the caudal pole. The right adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The right adrenal gland measured 1.5 cm length x 0.35 cm width at the caudal pole.

**INTERPRETED BY**

R. McKenzie Daniel,  
DVM, DABVP  
(Canine and Feline)

**Spleen**

The spleen exhibited a finely textured and homogenous parenchyma which was hyperechoic to the liver and renal cortical parenchyma. The capsule was smooth and regular without apparent expansion. The splenic vasculature at the hilus was normal in volume with no evidence of congestion or thrombosis. Acute to chronic inflammatory, neoplastic, or benign parenchyma changes were not noted.

**IMAGING PERFORMED BY**  
Rebekah Jakum, CVT  
ARDMS/RVT

**HOSPITAL NAME**

**Liver/ Gallbladder**

Community VP The liver was subjectively normal in size, structure, and contour. The liver parenchyma was uniform and hypoechoic to the spleen with a mild coarse echotexture. The hepatic and portal vasculature were normal in appearance without signs of congestion. The gallbladder was non-distended in size containing primarily anechoic content with mild nonorganized echogenic gallbladder debris. The cystic and common bile ducts were normal.

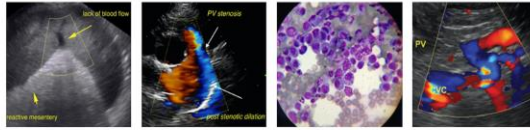
**REFERRING VET**

Dr. Hulshizer

**INVOICE Gastrointestinal**

16681 The stomach presented intact wall layering with a normal wall layer ratio. The lumen of the stomach was empty with no signs of ileus, obstruction, or foreign material. The stomach contained a mild amount of luminal gas.

**DATE**  
4/25/23



**PATIENT**

Molly Anthony

The small intestine presented intact wall layering with 1:3 muscularis/mucosa ratio. The lumen of the small intestine was empty with no signs of ileus, obstruction, or foreign material.

Normal visible colon wall layers were present with subjective semi-formed to soft fecal matter.

**SPECIES**

***Pancreas***

Canine

The parenchyma of the left limb, body, and right limb of the pancreas presented isoechoic to the adjacent omental fat. A normal curvilinear capsule contour of the pancreas was present. The visible pancreatic duct was normal. No signs of active inflammation or neoplastic disease were evident.

**BREED**

Shih Tzu

***Free Abdomen***

No overt lymphadenopathy or peritoneal effusion was present.

**SEX**

FS

**ULTRASONOGRAPHIC FINDINGS**

**AGE**

2010

- Structurally unremarkable gastrointestinal tract
- Soft fecal matter in colon
- Heterogeneous pancreas
- Low grade benign hepatopathy, minor gallbladder debris (non mucocele)
- Mild age-related renal changes

**WEIGHT**

15.6

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

**INTERPRETED BY**

R. McKenzie Daniel,  
 DVM, DABVP  
 (Canine and Feline)

Sonographically, there is no evidence of significant visceral pathology including no evidence of structural gastroenterocolic mural pathology or sonographic evidence of significant / active pancreatitis.

**IMAGING**

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Rebekah Jakum, CVT  
 ARDMS/RVT

At times, the gastrointestinal tract and pancreas may not always correlate with chronic gastrointestinal signs or significant pancreatitis. Dietary intolerance / food hypersensitivity, dysbiosis, inflammatory bowel disease, or low-grade to chronic pancreatitis which may present as sonographically normal, are all potentials. No evidence of intraabdominal neoplastic criteria was noted.

**HOSPITAL NAME**

Community VP

Low-fat novel protein or hydrolyzed diet trial with likely long-term dietary therapy and continued high colony count probiotics such as Provable are recommended. Consider a Tylosin trial, given the potential for dysbiosis, with consideration for potential long-term adverse effects on normal gastrointestinal flora. Empirical cobalamin supplementation, even though cobalamin levels were within normal limits may prove beneficial. Although considered less likely, a resting cortisol level to rule out occult Addison's Disease may be considered.

**REFERRING VET**

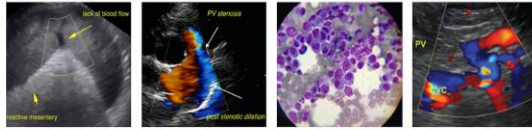
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**PATIENT**

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**SPECIES**

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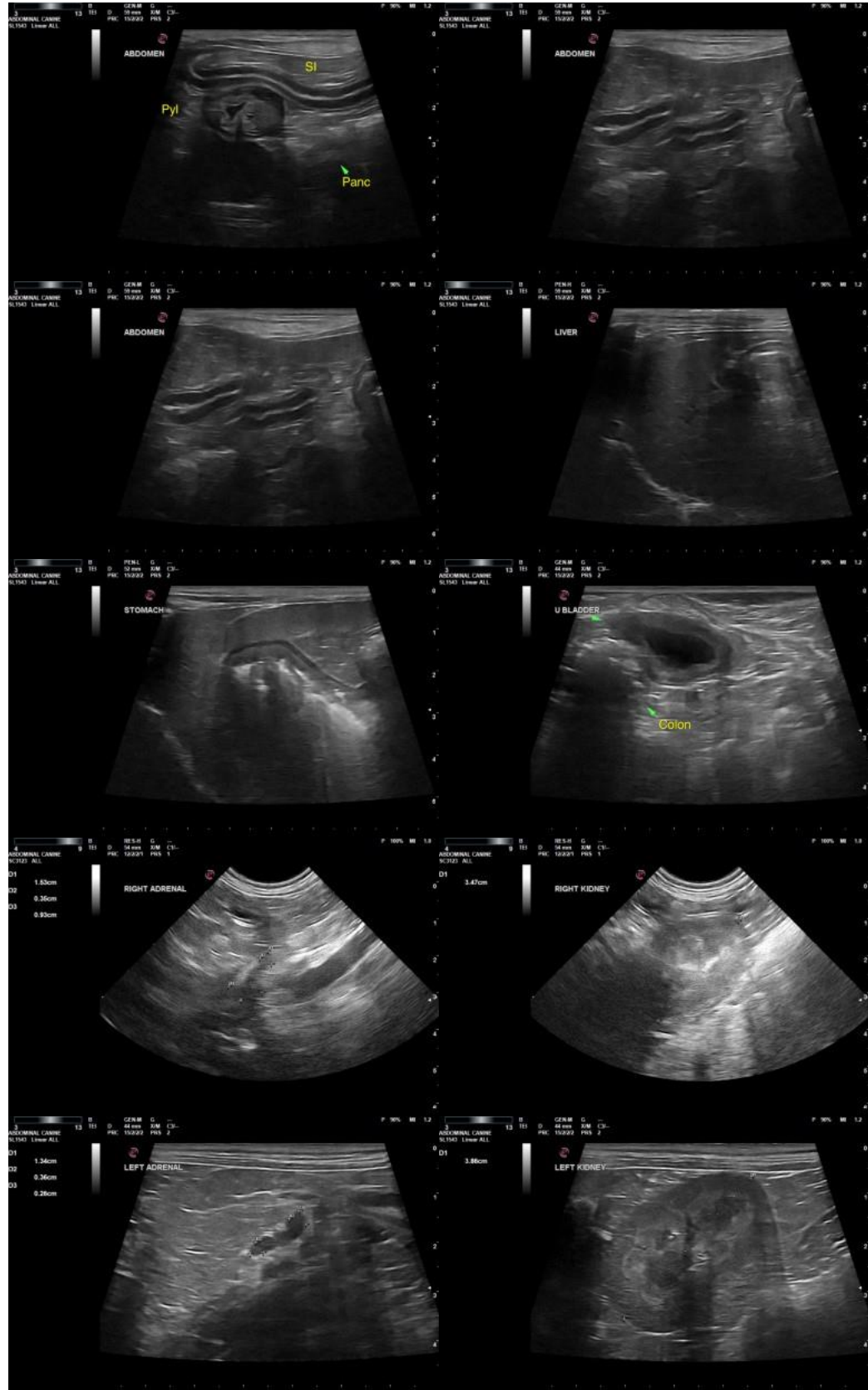
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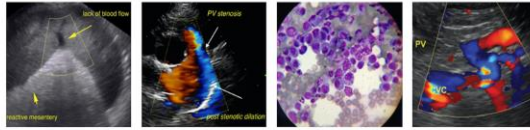
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**PATIENT**

Molly Anthony

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**

Shih Tzu

**R. McKenzie Daniel, DVM, DABVP (Canine/Feline Practice)**  
[mac.daniel@sonopath.com](mailto:mac.daniel@sonopath.com)

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FS

**AGE**

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