



**PATIENT**

Ruby Kang

**SPECIES**

Canine

**BREED**

Bichon Frise

**SEX**

FS

**AGE**

9y 10mo

**WEIGHT**

12.2 lbs.

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Dr. Kim

**HOSPITAL NAME**

Ridgefield Park AH

**REFERRING VET**

Dr. Kim

**INVOICE**

15713

**DATE**

12/27/22

**PRESENTING CLINICAL SIGNS**

Patient stopped eating 3-4 days starting Saturday (12/24).

Has been vomiting for the past 2 days. No stools.

**This submitted study contained 28 still images and 11 videos for review.**

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**Urinary System**

The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of 2.0 cm exhibited normal thickness and tone. Anechoic urine was present in the lumen with no uroliths or sediment. The ureteral papillae were normal. The ureters were not visible which is normal. No evidence of inflammatory or neoplastic changes was noted.

The area of the aortic trifurcation was free of pathology.

Normal size and margination were present in the kidneys. A normal 1:3 cortex / medulla ratio was maintained. The medulla and cortices were uniform in texture with some increased echogenicity and mild to moderate loss of corticomedullary symmetry and definition expected for the age of the patient. Pinpoint medullary mineral and minor pyelectasia were noted in both kidneys. The left kidney measured 5.2 cm in length. The right kidney measured 6.2 cm in length.

**Adrenal Glands**

The left adrenal gland was mildly prominent in size based on caudal pole width measurement in light of body weight with maintained symmetrical capsule contour and homogeneous parenchyma without evidence of left adrenal neoplastic criteria. The left adrenal gland measured 0.72 cm width at the caudal pole and 0.53 cm width at the cranial pole. The right adrenal gland was not definitively visualized.

**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.

**Liver/ Gallbladder**

The liver presented subjective mild enlarged in size. The parenchyma of the liver was subjectively normal in echogenicity compared to the spleen and renal cortices. The liver parenchyma was uniform with a mildly coarse echotexture. The capsule of the liver was symmetrically rounded to mildly swollen in margination. The hepatic and portal vasculature were normal in appearance without signs of congestion. The gallbladder was distended in size with potential for discrete gallbladder wall edema possible. The gallbladder contained moderate to marked nondependent to congealed variably echogenic sludge, along with concurrent mild anechoic content. No overt evidence of peripheral gallbladder inflammation or effusion was noted. The common bile duct was not definitively visualized without evidence of common bile duct dilation, stasis, or obstructive pattern.



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***Gastrointestinal***

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The stomach presented wall thickening secondary to echogenic mucosa hypertrophy. Intact wall layering was maintained and distinct. Mild retained anechoic fluid was present. No evidence of mechanical pyloric outflow obstruction was noted.

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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.

**BREED**

Bichon Frise

Normal visible colon wall layers were present with apparent formed feces in lumen.

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The pancreas was normal in size and contour with isoechoic to heterogeneous parenchyma compared to adjacent omentum, which may indicate age-related / patient variant, although potential for low-grade concurrent inflammation is possible. No signs of active inflammation or neoplasia.

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***Free Abdomen***

No overt lymphadenopathy or peritoneal effusion was present.

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**ULTRASONOGRAPHIC FINDINGS**

- Mild hepatomegaly
- Gallbladder mucocele with suspected concurrent cholecystitis
- Gastritis / gastroenteritis pattern with gastrohypomotility
- Heterogeneous pancreas
- Nonspecific chronic renal changes

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**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

Full CBC/Chemistry panel and urinalysis are recommended if not done for correlation with the sonographic findings. Assessment for evidence of cranial abdominal or subxiphoid discomfort primarily in the area of the gallbladder, as well as the area of the pancreas is suggested. A spec cPL is warranted to assess for low-grade pancreatitis. However, the patient's clinical signs are strongly suspected to be secondary to the gallbladder mucocele and suspected concurrent or secondary hepatopathy.

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Empirically and pending additional diagnostics, hepato-gastrointestinal support with close monitoring for evidence of icterus, increasing cholestasis, or hepatic enzyme elevations would be reasonable. However, if evidence of significant hepatic enzyme elevations or cholestasis, cholecystectomy may be indicated.

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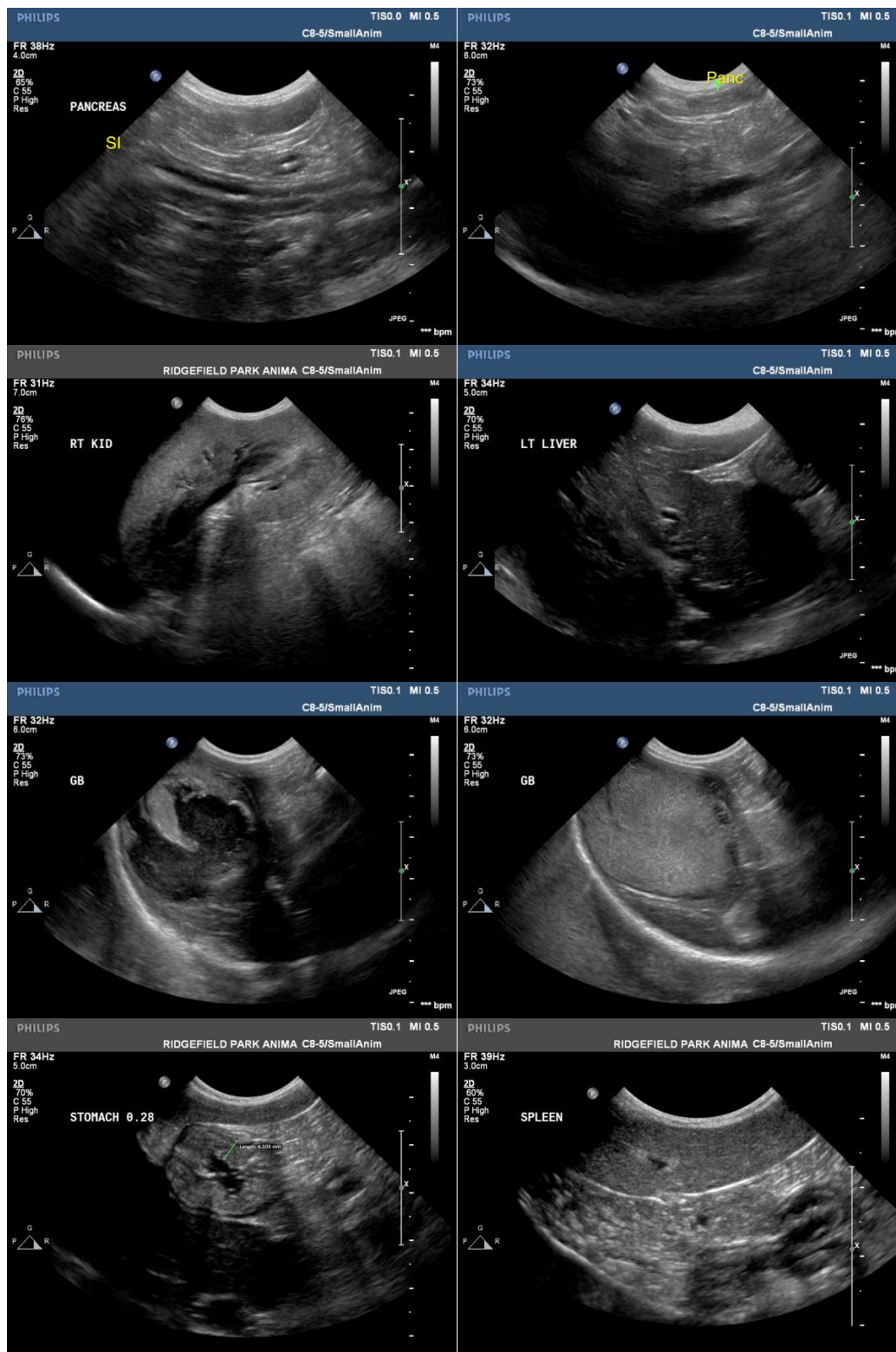
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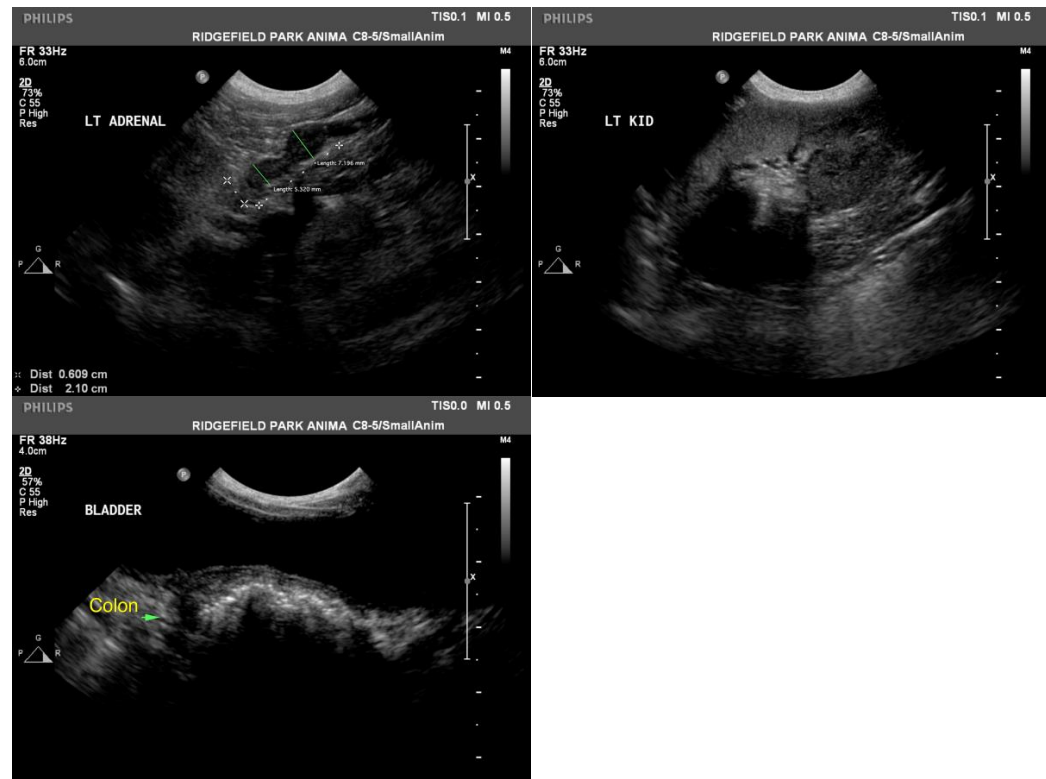
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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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info@SonoPath.com