



**PATIENT** \*The submitted study contained 43 still images and 5 videos for review.

Zeus Sanchez **PRESENTING CLINICAL SIGNS**

**SPECIES**

Canine

History: Patient presents to the hospital for ABD X-rays and Ultrasound recommended by previous vet due to loss of appetite, dark diarrhea and distended abdomen and lethargy, progressing since 8 days ago. Patient has history of allergies (commonly with skin and GI signs), went to another vet and received Apoquel, Cefodoxime and Entyce due to picky eating. Owners were giving Pedialyte as well. Patient was QAR at presentation, mildly icteric, with enlarged abdomen.

**BREED**

German Shepherd

Abnormal PE/Chem/CBC/UA Results: CBC \*WBC: 3.04 10<sup>3</sup>/uL \*NEU 2.43 10<sup>3</sup>/uL \*LYM: 0.50 10<sup>3</sup>/uL \*MONO: 0.10 10<sup>3</sup>/uL \*PLT: 100 10<sup>3</sup>/uL CHEM: \*Snap cPL: Abnormal \*Phosphorus: 5.1 mg/dL \*Calcium: 8.1 mg/dL \*Total Protein: 4.8 g/dL \*Albumin: 1.9 g/dL \*Cholesterol: 66 mg/dL \*ALT: >1000 U/I \*ALP: 285 U/I \*GGT: 29 U/I \*Tot Bilirubin: 0.8 mg/dL

**SEX**

M

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**Urinary System**

**AGE**

6 years

The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra 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 were noted.

**WEIGHT**

86.2 lb

Normal size and margination were present in the kidneys. A normal 1:3 cortex / medulla ratio and normal corticomedullary definition were maintained. 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 8.1 cm in length. The right kidney measured 7.4 cm in length.

**INTERPRETED BY**

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

The area of the aortic trifurcation was free of pathology.

The area of the prostate was not definitively visualized.

**IMAGING PERFORMED BY**

Dr. Kim

**Adrenal Glands**

The left adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 0.55 cm width at the caudal pole and 0.57 cm width at the cranial pole. The right adrenal gland was not definitively visualized.

**HOSPITAL NAME**

Ridgefield Park Animal  
Hospital

**Spleen**

The spleen exhibited generalized enlargement with areas of lateral and medial capsule asymmetry and generalized splenic parenchyma heterogeneity. Multiple mildly expansive variably echogenic mass lesions an example measuring 3.4 cm in diameter were present.

**REFERRING VET**

Dr. Kim

**Liver**

The liver was subjectively enlarged in size with areas of asymmetrical capsule contour and generalized nonuniform to variably echogenic parenchyma exhibiting moderate to severe coarse echotexture. No overt evidence of hepatic masses or hepatic congestion was observed. The gallbladder was non-distended in size. The gallbladder wall was moderately to severely thickened in appearance consisting of an echogenic double rim corresponding to the inner and outer portions of the wall. This is consistent with gallbladder wall edema. Possible causes may include acute inflammation, edema and anaphylaxis. Anechoic content with mild echogenic debris was present within the gallbladder lumen. The gallbladder wall measured 0.73 cm in diameter. The common bile duct was overtly normal.

**INVOICE**

10850ag

**DATE**

06/17/2022



**PATIENT**

**Gastrointestinal**

Zeus Sanchez The visualized stomach presented intact wall layering with a normal wall layer ratio. Potential for mild retained ingesta/chyme and probable luminal gas was present with no signs of ileus, obstruction or foreign material. The ventral gastric body wall measured 0.26 cm in width.

**SPECIES**

Canine

The small intestine presented intact wall layering with subjective maintained 1:3 muscularis/mucosa ratio. The lumen of the small intestine was empty with no signs of ileus, obstruction or foreign material. The small intestinal wall measured 0.28 cm in width.

**BREED**

German Shepherd

**Pancreas**

The area of the pancreas was not definitively visualized.

**SEX**

M

**Free Abdomen**

Moderate to severe volume peritoneal free fluid exhibiting mild echogenic changes which may suggest cellular component was present. Generalized uniform hyperechoic mesentery was noted. No obvious evidence of omental lymphadenopathy was visualized.

**AGE**

6 years

**ULTRASONOGRAPHIC FINDINGS**

**WEIGHT**

86.2 lb

- Infiltrative splenic pattern/splenomegaly with multiple mass/lesions
- Hepatomegaly exhibiting marked nonuniform parenchyma
- Moderate to severely thickened edematous gallbladder
- Moderate to severe volume peritoneal free fluid with mild echogenic changes
- Overtly normal visualized GI tract

**INTERPRETED BY**

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

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

Splenic infiltrative neoplastic criteria is met and is favored with non-neoplastic etiologies for the splenic presentation considered less likely. Overall, the liver was nonspecific with considerations including acute on chronic hepatitis or vacuolar hepatopathy with potential for concurrent neoplastic criteria. The thickened to edematous gallbladder may indicate acute severe cholecystitis, edema secondary to hepatic pathology or hypoalbuminemia while the possibility of neoplastic gallbladder criteria cannot be excluded. Assuming normal clotting status a hepatosplenic FNA using a 25g needle and fluid analysis cytology +/- C/S is recommended. Acute on chronic hepatic failure with potential for concurrent intestinal protein loss i.e. PLE is possible. A very guarded prognosis for this patient pending additional diagnostic and recommended sampling.

**HOSPITAL NAME**

Ridgefield Park Animal  
Hospital

**REFERRING VET**

Dr. Kim

**INVOICE**

10850ag

**DATE**

06/17/2022



**PATIENT**

Zeus Sanchez

**SPECIES**

Canine

**BREED**

German Shepherd

**SEX**

M

**AGE**

6 years

**WEIGHT**

86.2 lb

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Dr. Kim

**HOSPITAL NAME**

Ridgefield Park Animal  
Hospital

**REFERRING VET**

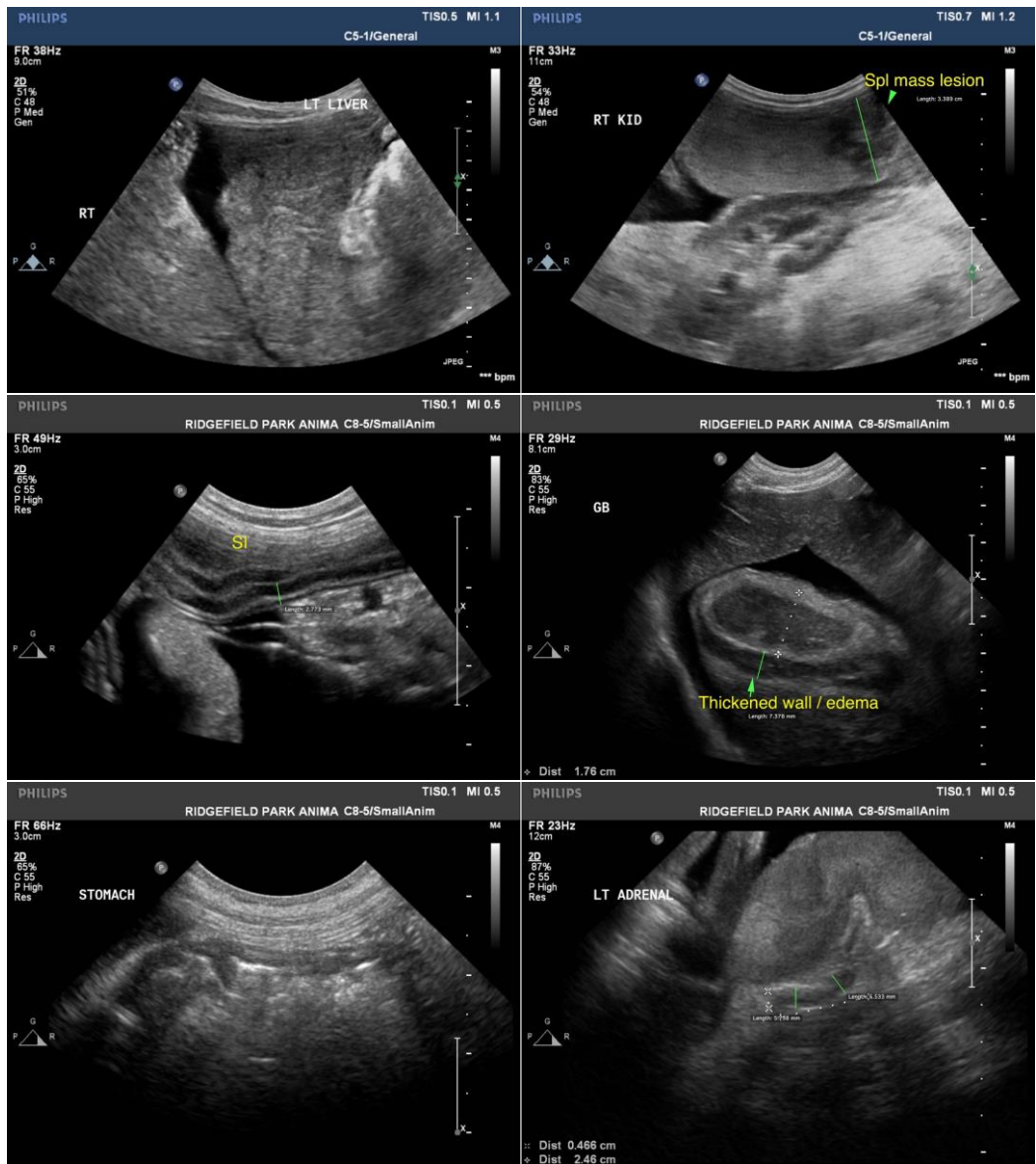
Dr. Kim

**INVOICE**

10850ag

**DATE**

06/17/2022





**PATIENT**

Zeus Sanchez

**SPECIES**

Canine

**BREED**

German Shepherd

**SEX**

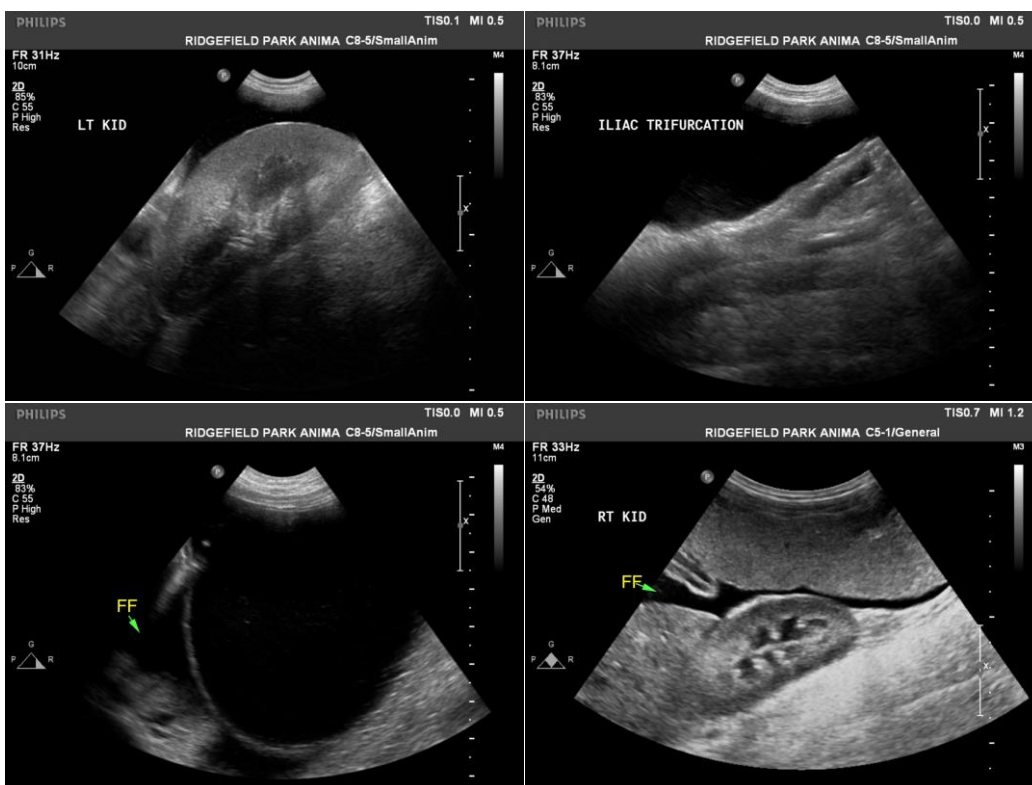
M

**AGE**

6 years

**WEIGHT**

86.2 lb



**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Dr. Kim

**HOSPITAL NAME**

Ridgefield Park Animal  
Hospital

**REFERRING VET**

Dr. Kim

**INVOICE**

10850ag

**DATE**

06/17/2022

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.

R. McKenzie Daniel, DVM, DABVP (Canine / Feline Practice)

info@SonoPath.com