



PATIENT

Oscar Hwang

SPECIES

Canine

BREED

Morkie

SEX

Neutered Male

AGE

9 Years

WEIGHT

6.90 lbs

INTERPRETED BY

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

IMAGING PERFORMED BY

Dr. Paul Kim

HOSPITAL NAME

Ridgefield Park Animal
Hospital

REFERRING VET

Dr. Paul Kim

INVOICE

48322

DATE

11-13-21

PRESENTING CLINICAL SIGNS

Patient was presented today with vomiting for two days, not wanting to eat and lethargy; the dog's last meal was yesterday early afternoon. A similar vomiting episode occurred late last month in October. In October, x-rays showed a gas-filled stomach and SI, and hepatomegaly.

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. Several small cystic calculi were present. These calculi did not appear to be obstructive. 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.

No evidence of pathology in the area of the residual prostate or aortic trifurcation.

The left kidney was not definitively visualized in this study.

Normal size and margination was present in the right kidney. A normal 1:3 cortex / medulla ratio was maintained. The medulla and cortices were uniform in texture with some increased echogenicity and mild loss of corticomedullary symmetry and definition expected for the age of the patient. No evidence of pelvic dilation was present. The right kidney measured 2.8 cm in length.

Adrenal Glands

The left adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 0.54 cm width at the caudal pole and 0.47 cm width at the cranial pole. The right adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The right adrenal gland measured 0.49 cm width at the caudal pole and 0.46 cm width at the cranial pole.

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 exhibited potential for mild generalized enlargement. The hepatic parenchyma revealed diffuse reduced echogenicity compared to the spleen and renal cortical parenchyma with a mild coarse echotexture. Increased portal vein prominence was evident. The capsule of the liver was normal in margination. Distinct masses or nodules were not evident. The hepatic and portal vasculature were normal in appearance.

The gallbladder was non-distended in size with thin walls and primarily anechoic luminal content. The cystic and common bile ducts were normal.

Gastrointestinal

The stomach presented mild wall thickening secondary to echogenic mucosa hypertrophy. Intact wall layering was maintained and distinct. The gastric body wall measured 0.46 cm width. Mild gastric distension with minor retained anechoic fluid without evidence of mechanical pyloric outflow obstruction. No evidence of retained ingesta or foreign material.



PATIENT

Oscar Hwang

The small intestine presented intact wall layering with maintained 1:3 muscularis/mucosa ratio with intermittent duodenojejunal mucosal speckling. The lumen of the small intestine was empty with no signs of ileus, obstruction or foreign material. The duodenum wall width measured 0.39 cm and the jejunum wall width measured 0.28 cm.

SPECIES

Canine

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

Pancreas

BREED

Morkie

The pancreas was normal in size and contour with isoechoic to heterogeneous parenchyma compared to adjacent omentum. No signs of active inflammation or neoplasia.

Free Abdomen

SEX

Neutered Male

No overt lymphadenopathy or peritoneal effusion was present.

ULTRASONOGRAPHIC FINDINGS

AGE

9 Years

- Gastroenteritis pattern with mild gastric stasis, possible inflammatory bowel.
- Heterogeneous pancreas - age related echogenic variant, remodeling owing to previous inflammation, or low grade to chronic pancreatitis possible.
- Mild age related right kidney.
- Several small nonobstructive cystic calculi.
- Subjective mild hypoechoic liver - nonspecific, reactive hepatopathy suspected, acute hepatitis, or hepatic congestion possible.

WEIGHT

6.90 lbs

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

INTERPRETED BY

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

The potential for low grade to chronic pancreatitis would be suspected if evidence of cranial abdominal or subxiphoid discomfort on palpation.

Urine culture and sensitivity on a sterile urine sample may be considered if clinically indicated.

IMAGING PERFORMED BY

Dr. Paul Kim

A GI panel to include PLI/TLI/Cobalamin/Folate may be considered for further assessment for underlying gastrointestinal disease and correlation with pancreatic presentation.

HOSPITAL NAME

Some or all of the following protocol may be considered given the patient's vomiting with as needed gastrointestinal support.

Helicobacter/Gastritis protocol

A clinical trial of **Zithromax** (*Dogs*: 5-10 mg/kg p.o. q24h. May increase dosing interval to q48h after 3-5 days of treatment), **Metronidazole** (10-20 mg/kg p.o. b.i.d.), **Pepcid** (0.5-1 mg/kg s.i.d.) and **Sucralfate** (0.5-2 g/dog PO) or **Omeprazole** (1 mg/kg p.o. s.i.d.) over the next 3 weeks along with a **novel-protein or hydrolyzed diet** with slurry feeding b.i.d./t.i.d. over the next 2-4 days and then increase to canned diet bid. Dry food should be avoided over the next 4 weeks. A recheck sonogram to assess GI improvement or progression would be ideal in 4 weeks

Ridgefield Park Animal
Hospital

REFERRING VET

Dr. Paul Kim

INVOICE

48322

DATE

11-13-21



PATIENT

Oscar Hwang

SPECIES

Canine

BREED

Morkie

SEX

Neutered Male

AGE

9 Years

WEIGHT

6.90 lbs

INTERPRETED BY

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

IMAGING PERFORMED BY

Dr. Paul Kim

HOSPITAL NAME

Ridgefield Park Animal
Hospital

REFERRING VET

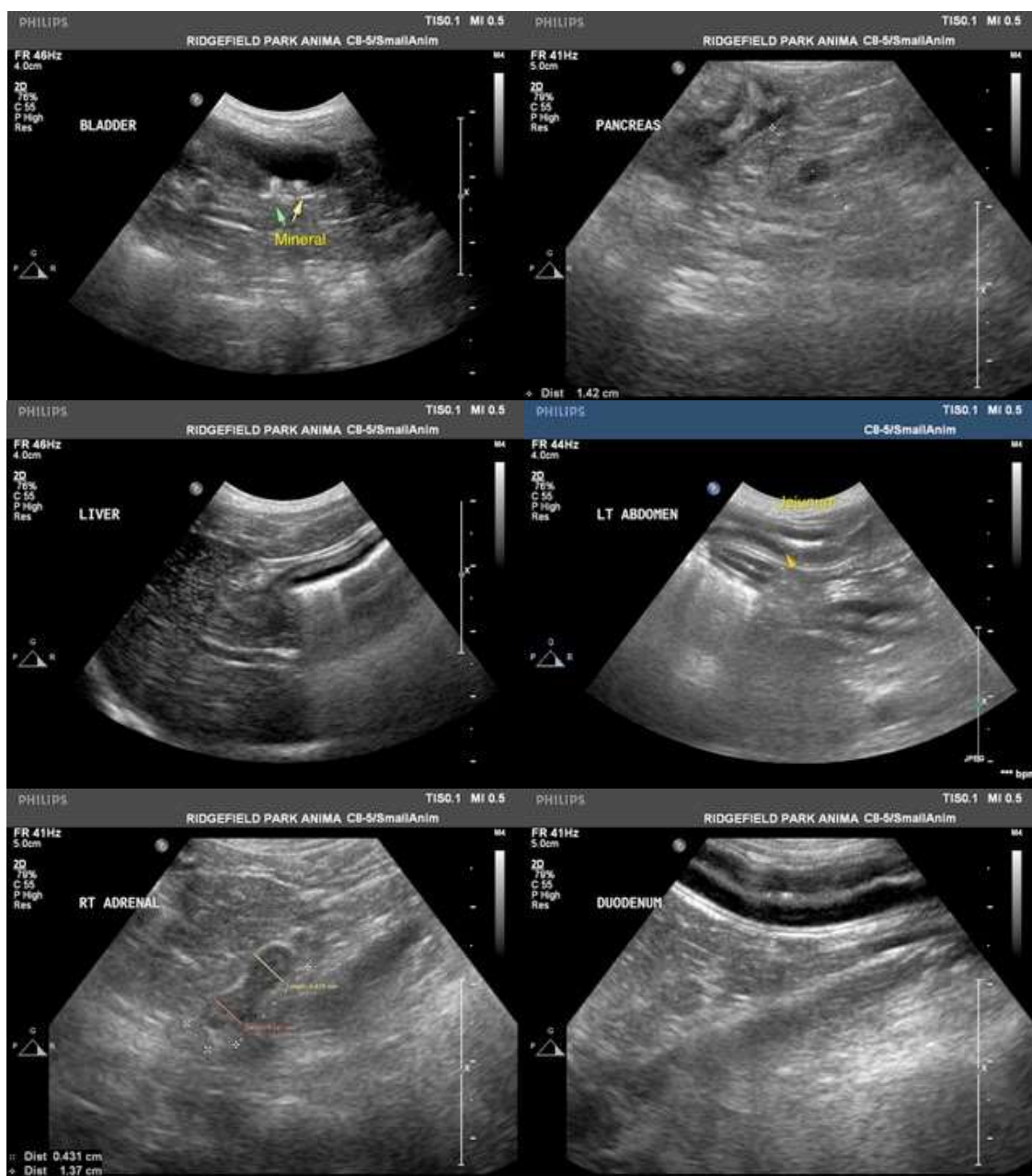
Dr. Paul Kim

INVOICE

48322

DATE

11-13-21





PATIENT

Oscar Hwang

SPECIES

Canine

BREED

Morkie

SEX

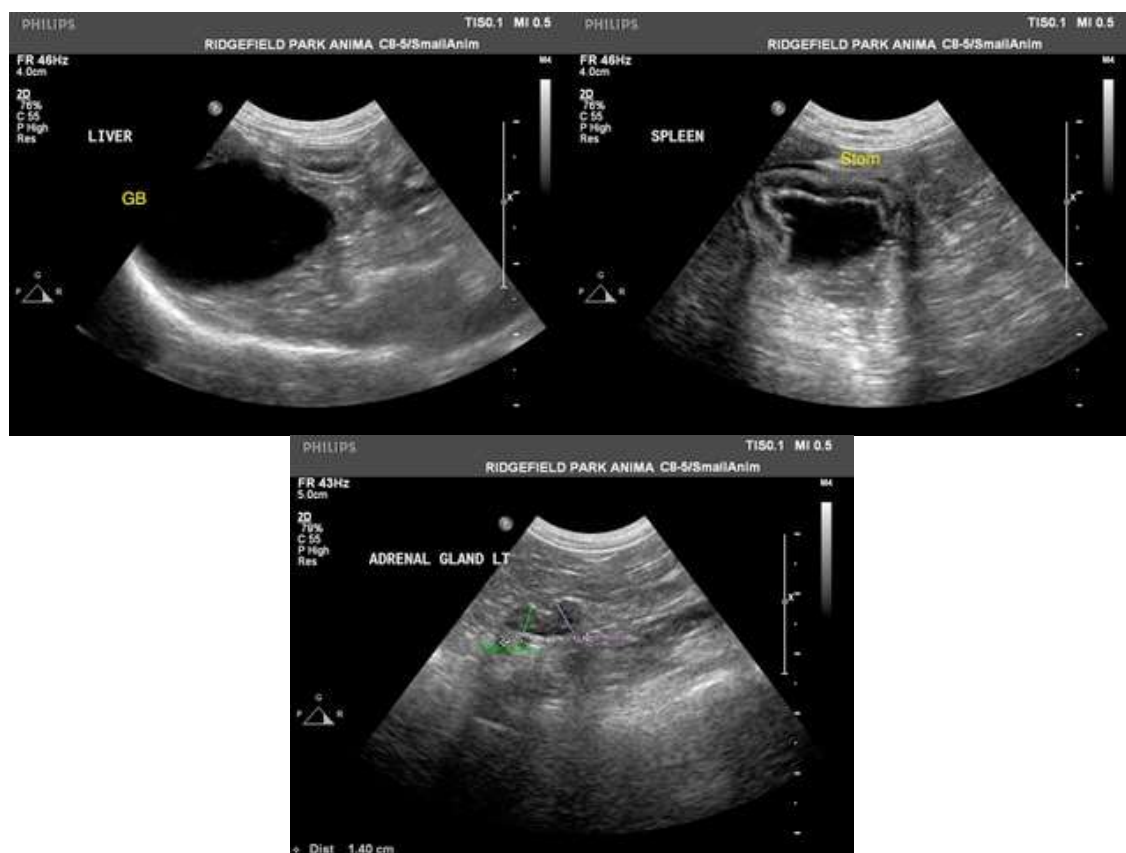
Neutered Male

AGE

9 Years

WEIGHT

6.90 lbs



INTERPRETED BY

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

IMAGING PERFORMED BY

Dr. Paul Kim

HOSPITAL NAME

Ridgefield Park Animal
Hospital

REFERRING VET

Dr. Paul Kim

INVOICE

48322

DATE

11-13-21

The information and recommendations provided are based on the images presented by the referring veterinarian. 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