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Clinical Sonography & Telecytology
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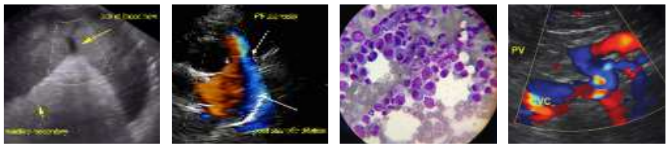


SonoPath.com
1-800-838-4268 info@sonopath.com

PATIENT

Max Jang

SPECIES

Canine

BREED

Yorkshire Terrier

SEX

Neutered Male

AGE

13 years

WEIGHT

20.7 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

DATE

9/13/21

PRESENTING CLINICAL SIGNS

Patient presents to the hospital due to lethargy, decreased appetite (rejecting regular kibble but accepting homemade diet), swollen abdomen, nausea and dark/ black diarrhea for the past 2 to 4 weeks. Ow has also noticed hacking cough. Patient was QAR at presentation, tense enlarged abdomen.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder, trigone, and cystourethral junction 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.

No overt pathology was noted in the area of the residual prostate.

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 loss of corticomedullary symmetry and definition expected for the age of the patient. No evidence of pelvic dilation was present. The left kidney measured 5.0 cm in length. The right kidney measured 5.2 cm in length.

Adrenal Glands

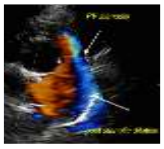
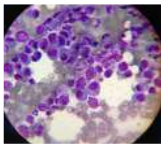
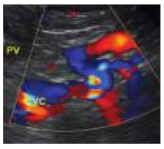
The left adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 0.43 cm width at the caudal pole and 0.35 cm width at the cranial pole. The right adrenal gland was indistinctly visualized, yet without overt pathology. The right adrenal gland subjectively measured 0.70 cm width at the caudal pole.

Spleen

The spleen exhibited primarily finely textured parenchyma which was hyperechoic to the liver and renal cortical parenchyma. Mild generalized parenchyma heterogeneity was present without evidence of nodular changes. Pinpoint hyperechoic parenchymal foci, which may indicate pinpoint areas of microinfarction, fibrosis, or mineralization were present. 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. The parenchymal heterogeneity is likely consistent with benign changes such as extramedullary hematopoiesis or age-related remodeling with minor potential for inflammatory or neoplastic disease. No splenic masses or nodules were present.

Liver/ Gallbladder

The liver was marked enlarged in size with an ill-defined, isoechoic ventrocaudal mass lesion extending caudally past the level of the gastric axis. This mass lesion measured approximately 5.0 cm in diameter. Focal areas of parenchymal mineralization were noted within the ventrocaudal liver mass. Concurrent, mid-parenchymal, nonhomogeneous to isoechoic nodular mass lesions were also present. An example

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of a nodular mass lesion measured 4.0 cm in diameter. The liver exhibited asymmetrical ventral and caudal contour. The liver parenchyma was mildly nonuniform and hypoechoic to the spleen with a moderate coarse echotexture and subjective mild to benign parenchymal remodeling. The hepatic and portal vasculature were normal in appearance without signs of congestion. The gallbladder was non distended in size with mild, echogenic, nonmineralized biliary sludge. The cystic duct and common bile ducts were normal without evidence of dilation.

Gastrointestinal

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 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. The jejunum wall width measured 0.33 cm.

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

Pancreas

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

No overt lymphadenopathy or peritoneal effusion was present.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- Marked hepatomegaly with ventrocaudal focally mineralized mass and intermittent mid liver nonhomogeneous nodular mass lesions
- Mild gallbladder debris (non-mucocele)
- Moderate subjectively mildly cellular peritoneal free fluid
- Bilateral mild chronic renal changes

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Assuming normal Albumin levels, the peritoneal effusion in this case Is most likely owing to hepatomegaly, hepatic parenchymal disease, and portal hypertension. Effusion analysis cytology, as well as assuming normal clotting status, hepatic FNA may be considered for further assessment. Hepatic neoplasia is favored, although non-neoplastic (inflammatory to other), etiologies are possible. However, the parenchymal mineralization is suggestive of neoplasia. If subnormal Albumin levels, which may be owing to hepatic disease, some degree of potential intestinal protein loss / PLE, given the presence of diarrhea, cannot be definitively excluded.

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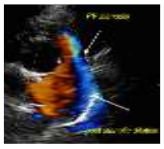
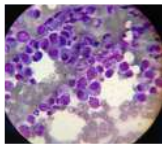
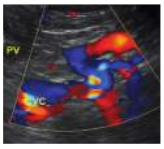

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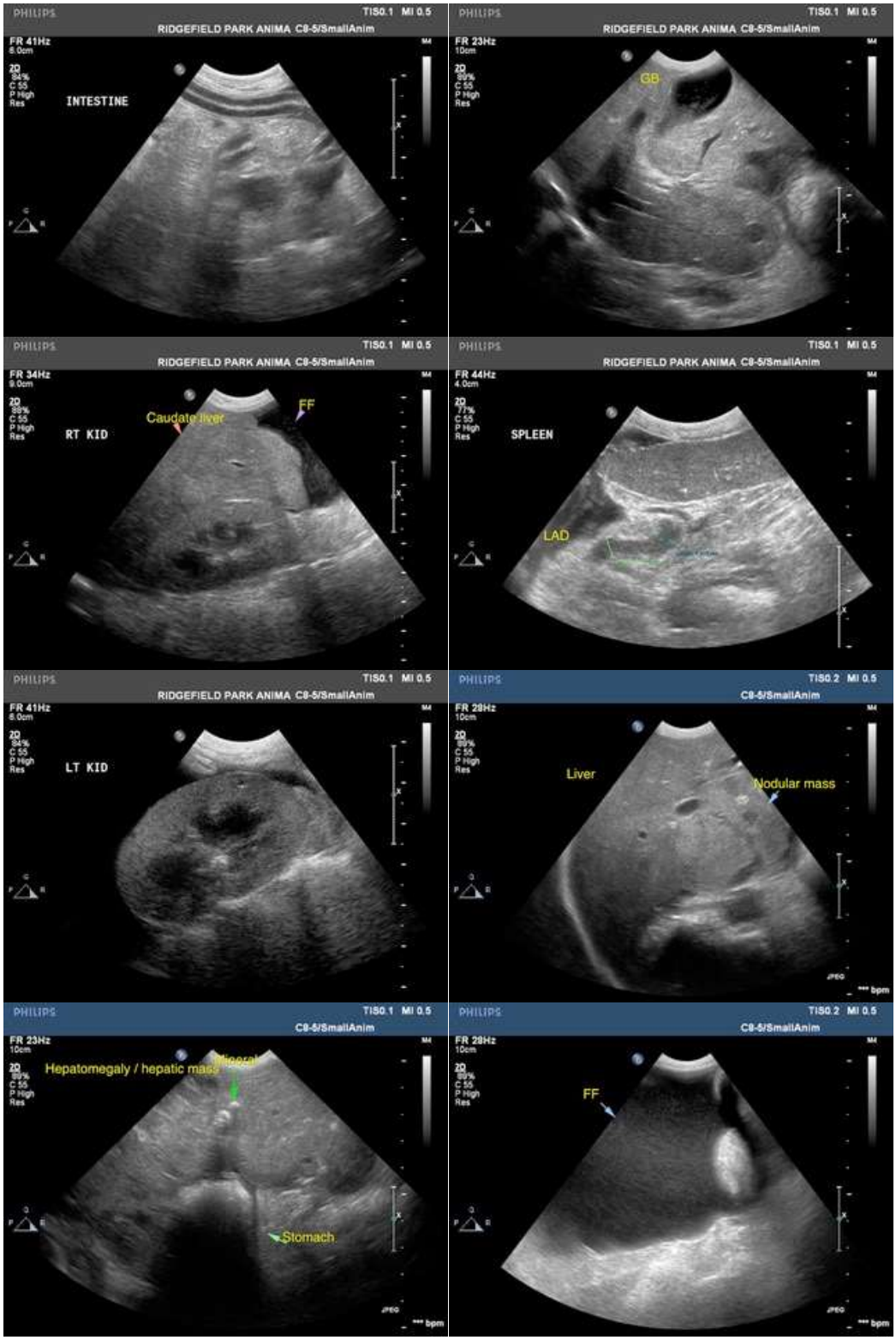

The information and recommendations provided are based on the images presented by the

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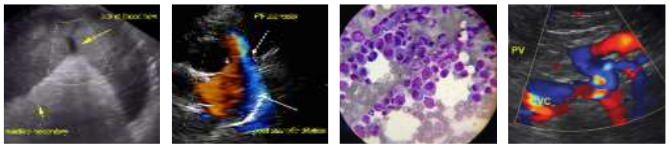

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referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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