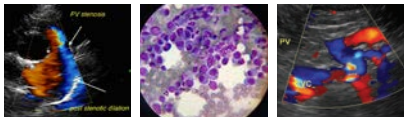
IMAGING PERFORMED BY

IntraPet.com



SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
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DATE

11/8/22

PATIENT

Ringo Crisp

SPECIES

Canine

BREED

Chinese Crested

SEX

Neutered Male

AGE

1/1/07

WEIGHT

10.7 Pounds

INTERPRETED BY

Beth Johnson, DVM DACVIM

IMAGING PERFORMED BY

Stephanie Warga RDCS, RVT

HOSPITAL NAME

Perry Hall AH

REFERRING VET

Dr. Baer

INVOICE

42638

PRESENTING CLINICAL SIGNS

Recurrent intermittent episodes of vomiting and hyporexia, 3 episodes past 2 months and abnormal CPL.

Current Medications: 1/2/20- current Benazepril 5mg 1/4 tab PO SID
8/1/22- current Mirtazapine 2.7mg 1/2 tab PO SID
Lab Results: 11/3/22: Snap cpl- abnormal-CBC: HCT: 34.8%, hemoglobin: 12.3, platelets: 741,000 CHEM 27: BUN: 99, ALT: 280, ALP: 963, GGT: 20
Radiographs: See attached radiology report.
Date of Previous IntraPet Ultrasound: 10/2020, 6/2021, 9/2021. See attached.
Sedation: Torbugesic.
Stat Report: Not requested.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder is moderately distended with anechoic contents. No masses, inflammatory changes, echogenic sediment or cystoliths are observed. The urinary bladder, trigone and visible pelvic urethra are normal in thickness with a smooth mucosal surface.

Prostate is normal in size, echotexture and echogenicity for a neutered male.

Kidneys are overall normal in size and shape with smooth peripheral margination. A normal 1:3 cortex to medulla ratio is maintained. The medulla and cortices are uniform in texture with some mild increased cortical echogenicity and mild loss of corticomedullary distinction, expected in this age patient. There is no evidence of pyelectasia or infarcts observed. Non-obstructive linear multifocal hyperechoic diverticular foci with acoustic shadowing are noted in both kidneys. The left kidney measures 3.48 cm. The right kidney measures 3.6 cm.

Adrenal Glands

The right adrenal gland is normal in size (1.24 cm long x 0.48 cm at the caudal pole and 0.41 cm at the caudal pole), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

The left adrenal gland is normal in size (1.59 cm long x 0.49 cm at the cranial pole and 0.45 cm at the caudal pole), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

Spleen

The spleen is subjectively normal in size with a normal smooth capsular contour. Parenchyma is appropriately finely textured and homogenous with normal echogenicity relative to surrounding tissue (hyperechoic to liver). No focal nodules or masses are observed. Splenic vasculature appears normal.

Liver

Liver is subjectively enlarged with mildly irregular margins. Parenchyma is diffusely heterogenous characterized by multiple poorly defined hypoechoic nodules within otherwise hyperechoic liver parenchyma. An approximately 6.0 cm x 7.3 cm, mixed, largely cystic mass is noted in the deep/dorsal mid to right caudal liver. A second, similar appearing but smaller cystic lesion measuring 1.5 cm x 1.0 cm is noted near the gallbladder. This second lesion may be attached to the larger cystic mass, but attachment can't be determined definitively. Visible vasculature and biliary tree appear normal without distension or congestion.

Gallbladder is moderately distended with anechoic bile as well as suspended and gravity dependent echogenic debris. The wall is smooth without visible thickening. There is no evidence of cystic or CBD dilation. There is no evidence of effusion or inflammation.

Gastrointestinal

The stomach wall is normal in thickness (canine < 0.5 cm and feline < 0.4 cm) and layering. The lumen of the stomach is empty with no evidence of obstruction, foreign material or infiltrative disease. Pyloric outflow tract appears patent.

The visible small intestines are normal in wall thickness and layering (canine duodenum < 0.5 cm and feline duodenum < 0.4 cm; other < 0.3 cm). Small intestinal motility appears adequate (1-3 contractions per min). The lumen of the small intestine is empty with no evidence of obstruction, foreign material or infiltrative disease.

The visible colon is normal in wall thickness (< 0.2 cm) and layering. Contents are consistent with normal formed feces and gas.

Pancreas

The pancreatic parenchyma is appropriately isoechoic to surrounding tissue. Visible capsule is smooth and normal in contour. There is no visible pancreatic duct dilation. There is no evidence of active peripancreatic inflammation.

Free Abdomen

There is no evidence of free peritoneal effusion noted in these images.

There is no apparent lymphadenopathy noted in these images.

PRIMARY FINDINGS

- **Diffusely heterogenous liver and discrete cystic mass (possibly two masses) –** Differentials include both benign and malignant disease and cannot be differentiated without tissue sampling (i.e., benign cystic nodule versus adenoma/hepatoma versus hepatocellular carcinoma, hemangiosarcoma, etc.. The size of the mass is progressive compared to last year's ultrasound.

- **Gallbladder debris -** Cholecystic debris is of unknown clinical significance. It can be seen with biliary stasis from fasting or illness. Cholecystic debris is not necessarily related to hepatobiliary disease. Echogenic bile is most commonly an incidental finding in dogs and should be interpreted in combination with clinical signs such as nausea, inappetence, cranial abdominal discomfort and/or laboratory changes such as increased ALP and/or increased Tbili.

SECONDARY FINDINGS

- Age related kidney changes with non-obstructive dystrophic mineralization bilaterally

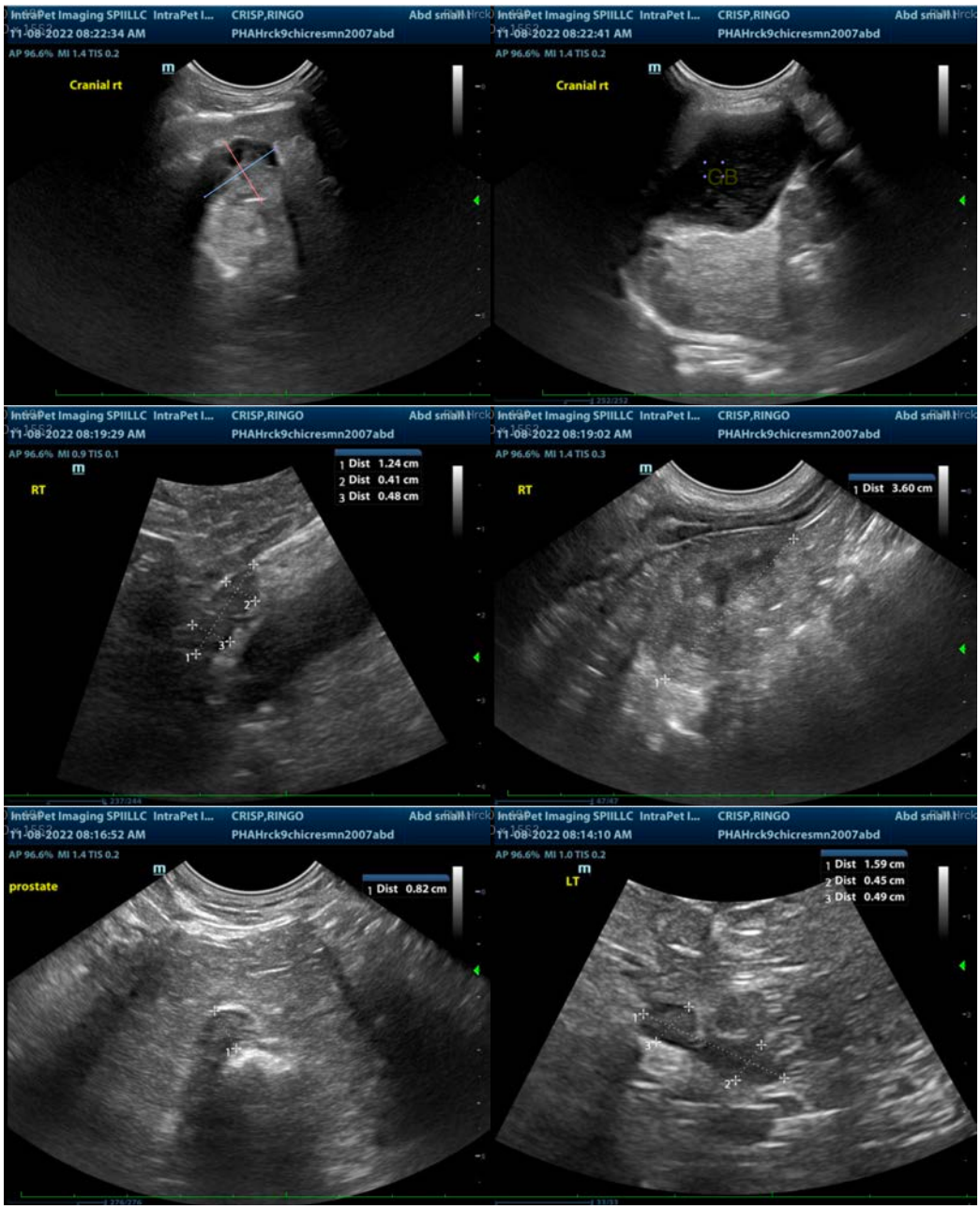
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

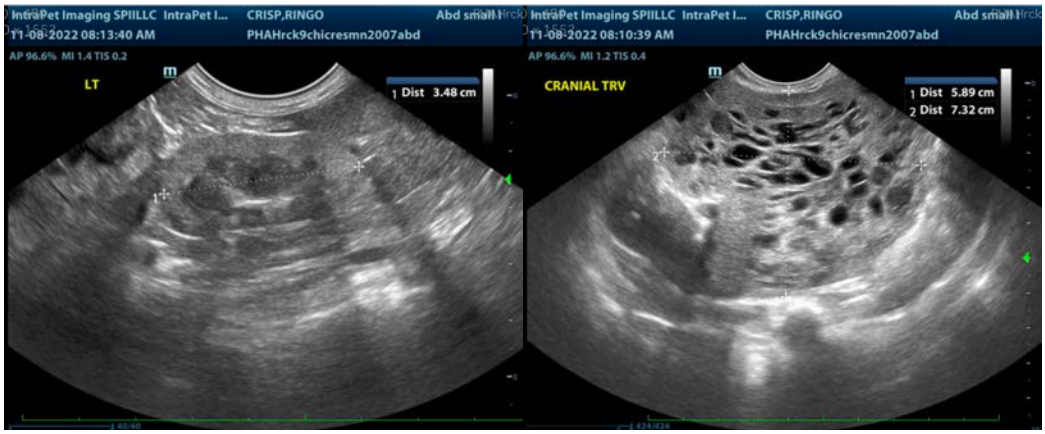
Given this patient's reported gastrointestinal signs, a gastrointestinal malabsorption panel (including cobalamin, folate, TLI and PLI) to Texas A&M GI Laboratory is recommended for further evaluation of GI and pancreatic function.

A baseline cortisol is recommended. If baseline cortisol is less than 2, a full ACTH stimulation test is recommended to rule out hypoadrenocorticism.

Three view thoracic radiographs are recommended for further assessment of cardio-pulmonary status as well as to further evaluate for any evidence of metastatic disease, if not recently evaluated.

If not recently evaluated, a fine needle aspirate of the liver mass could be considered if patient's coagulation status is appropriate. Alternatively, an exploratory laparotomy for excisional biopsies/mass removal for histopath could be considered, at which time biopsies of the GI tract are also recommended, given the chronic gastrointestinal signs. Having said that, full resectability is questionable, given the size of the largest lesion and the suspicion for multiple lesions. However, pre-surgical planning abdominal CT scan could be considered for further guidance on resectability.





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.

Beth Johnson, DVM, DACVIM
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