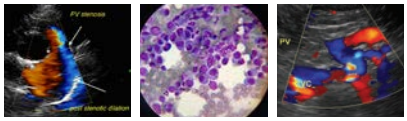
IMAGING PERFORMED BY

IntraPet.com



SonoPath
Clinical Sonography & Telecytology
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DATE

4/5/23

PATIENT

Duke Baker

SPECIES

Canine

BREED

Boxer

SEX

Neutered Male

AGE

3/1/11

WEIGHT

91.6 Pounds

INTERPRETED BY

Beth Johnson, DVM DACVIM

HOSPITAL NAME

Pleasantville AH of Fallston

REFERRING VET

Dr. Gounaris

INVOICE

46426

PRESENTING CLINICAL SIGNS

Chronic GI symptoms. Started about a year ago - several episodes of vomiting, specifically after woofing his food down. Remedied this by adding some water to his food. Past 6 mos they have appreciated highly audible gastric noises. Appetite unaffected, no associated vomiting or diarrhea. Over the past 2-3 months noticed some episodes of regurgitation, "throat clearing", and more frequent vomiting after eating a meal. Started to feed him smaller portions throughout the day. Has not helped. He usually vomits the food shortly after eating, consumes the vomit, and only then is able to keep the meal down. Sometimes he will vomit water after being at rest. Gastric sounds have become more frequent. Appetite completely unaffected. Owner thinks he is drinking the same amount of water. No diarrhea. 4# weight loss since December. BW back then when his eye was enucleated was WNL for the most part. ALP in the 600s. PE - mostly unremarkable, mm pink CRT 1-2, left eye enucleated, peripheral LN palpate normally, no audible murmurs or arrhythmias but panting heavily, no large appreciable masses on abdominal palpation but fairly tense on deep palpation.

Current Medications: carprofen 200 mg SID (chronic since July 2022 for arthritis). Started gabapentin 400 mg BID, omeprazole 40 mg SID, and cerenia 80 mg SID 4/3/2023.
Lab Results: 12/15/2022 - ALP 661, HCT 40%. 4/3/2023 - ALP 1215, HCT 36%
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Midazolam/Torbugesic IV.
Stat Report: Not requested.
Imaging Performed By: Stephanie Warga RDCS, RVT.

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, mineral or infarcts observed. Multiple small cortical cysts noted bilaterally. The left kidney measures 7.81 cm. The right kidney measures 8.02 cm.

Adrenal Glands

Adrenal glands are plump/swollen in size. Normal shape and contour are maintained without evidence of capsular invasion. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal. The left adrenal gland measures 3.04 cm long x 1.12 cm at the cranial pole and 1.12 cm at the caudal pole. The right adrenal gland measures 4.1 cm long x 1.19 cm at the cranial pole and 1.33 cm at the caudal pole.

Spleen

The spleen has been previously removed due to reported hemangiosarcoma.

Liver

The liver is subjectively normal in size with normal smooth curvilinear peripheral contour. Parenchyma is appropriately hypoechoic to the spleen in echogenicity and appropriately mildly coarse and homogenous in echotexture. In the deep right liver, there is a 6.7 cm x 4.8 cm cystic septated mass. Visible vasculature and biliary tree appear normal without distension or congestion.

Gallbladder is moderately distended with anechoic bile as well as mild 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.

The mesenteric lymph nodes are prominent in size with swollen capsular contour. Normal elongated shape (length to width ratio) is maintained. There is no loss of parenchymal detail.

PRIMARY FINDINGS

- **Bilateral adrenomegaly –** consistent with adrenal hyperplasia secondary to pituitary dependent hyperadrenocorticism vs stress or normal variant. Interpret in combination with clinical signs of hyperadrenocorticism.

- **Cystic/septated liver mass –** differentials include benign cyst, hematoma, etc. versus a metastatic hemangiosarcoma lesion, which has to be considered, given the patient's history.

- **Reactive mesenteric lymph nodes –** infiltrative neoplastic disease cannot be ruled out but is considered less likely.

SECONDARY FINDINGS

- Age related kidney changes with small bilateral cortical cysts

- **Mild 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.

- No spleen, previously removed

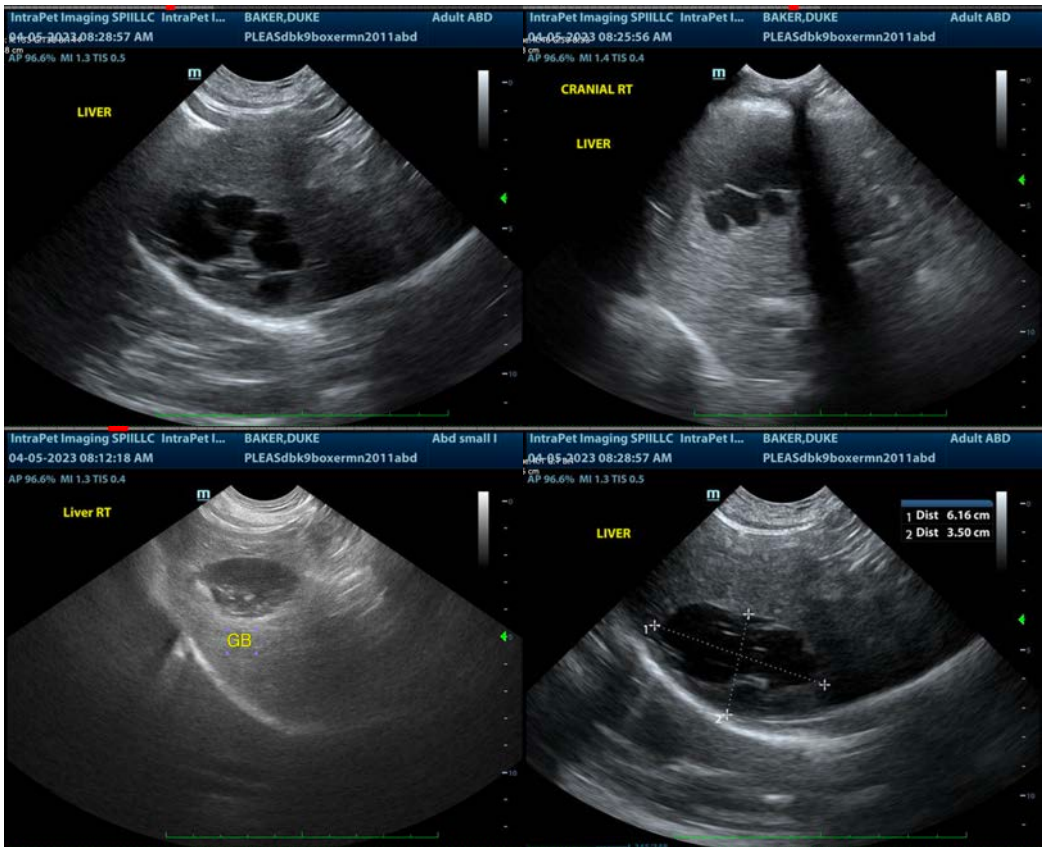
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

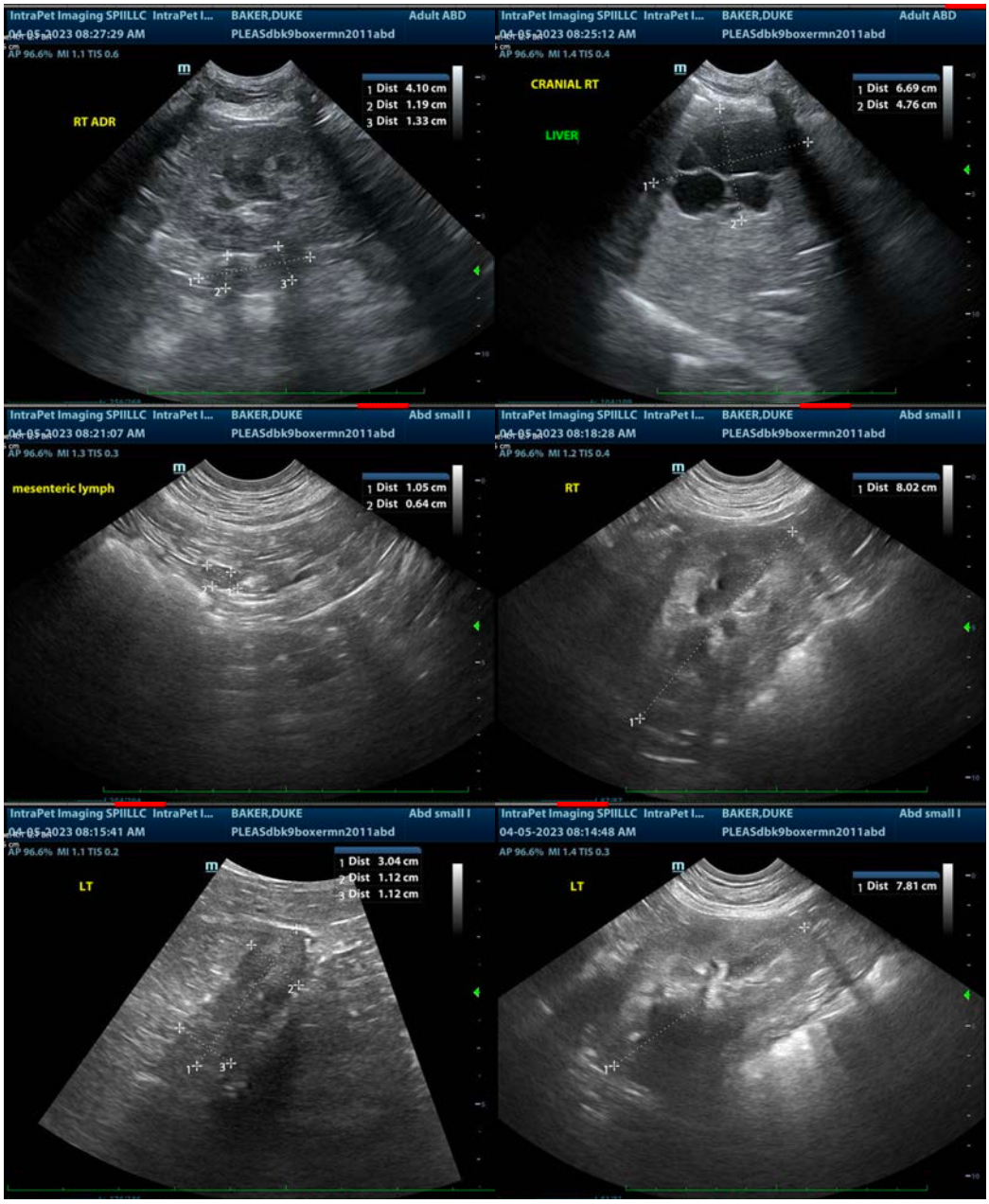
Given this patient's reported gastrointestinal signs potentially associated with rapid eating or drinking and some reported "throat clearing", differentials include potentially early or emerging laryngeal paralysis or possibly GERD, and potentially exacerbation caused by polyphagia and/or polydipsia. Given this patient's bilateral adrenomegaly, if clinical PU/PD/polyphagia is appreciated, further evaluation for hyperadrenocorticism could be considered, beginning with a low-dose Dexamethasone suppression test.

In the meantime, potentially more aggressive antacid therapy such as twice daily Omeprazole could be considered to address possible GERD.

Additionally, given the history of hemangiosarcoma and the presence of the liver mass, 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.

Options for the liver mass include either monitoring beginning with a follow up ultrasound in 4-6 weeks versus tissue sampling such as a fine needle aspirate if it can safely be reached and if patient's coagulation status is appropriate. Alternatively, the most aggressive approach would be surgical excision for biopsy





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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