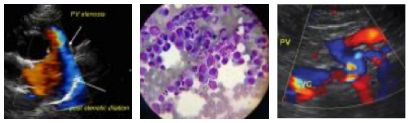
IMAGING PERFORMED BY

IntraPet.com



SonoPath
Clinical Sonography & Telecytology
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DATE

7.10.2022

PATIENT

Hank Eck

SPECIES

Canine

BREED

German SH Pointer

SEX

Male

AGE

2009

WEIGHT

58.9 lbs

INTERPRETED BY

Andrea Nicastro, DMV, Diplomate DACVIM (Small Animal Internal Medicine)

HOSPITAL NAME

Animal Emergency Hospital

REFERRING VET

Dr. Thompson

INVOICE

11215

PRESENTING CLINICAL SIGNS

Presenting Complaint: Lethargic. Vomiting.

History: Date: 07-08-2022 Notes: Hank is a 13 y/o MI GSP who presents for vomiting and anorexia - Ate breakfast normally yesterday, proceeded to vomit food later - went outside and ate grass and proceeded to vomit up grass - was not interested in eating dinner last night, nor was interested in hotdog - was more lethargic last night - did eat a piece of cheese last night as well, was not interested in rice - this morning at cat food and rice, so far was able to keep it down - normal U/D, no C/S/D - Hx - bad UTI, no other medical conditions Medications: - monthly preventatives

Assessment: Vomiting and anorexia: metabolic diseases vs neoplasia vs gastroenteritis vs FB obstruction vs IBD vs pancreatitis vs GI parasites vs other.

Current Medications: amoxicillin, metronidazole, buprenorphine, maropitant, denamarin, omperazole

Date of Previous IntraPet Ultrasound: No previous.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.

Imaging Performed By: Rachel Brilhart, RDMS.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The **urinary bladder** is mildly distended with anechoic urine. The wall is of appropriate thickness for the level of repletion. No cystic calculi are observed. A foley catheter is seen within the lumen.

The **prostate** is enlarged (4.54 cm in length; 3.08 in width) with a normal shape and smooth peripheral contours. The gland is pelvically located. The parenchyma is mildly heterogenous in appearance. No distinct focal lesions are observed. The prostatic urethra is not overtly dilated.

The **left kidney** is normal size (7.33 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with mild to moderate loss of corticomedullary distinction. Trace pyelectasia is present. There is no evidence of nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The **right kidney** is normal size (6.53 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with moderate loss of corticomedullary distinction. Trace pyelectasia is present. There is no evidence of nephroliths, infarcts or hydroureter. Renal vasculature is normal.

Adrenal Glands

The **left adrenal gland** is upper limits of normal size (0.90 cm at cranial pole) (0.81 cm at caudal pole) (3.01 cm in length); normal shape; homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

The **right adrenal gland** is upper limits of normal size (1.08 cm at cranial pole) (0.78 cm at caudal pole) (3.14 cm in length); with a slightly irregular shape; homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

Spleen
The **spleen** is normal in size (2.24 cm in width at the level of the hilus) with a normal capsular contour. The parenchyma is mottled in appearance, with several ill-defined hypoechoic nodules/areas. No focal lesions are observed. Splenic vasculature is normal.

Liver
The **liver** is subjectively prominent in size with swollen curvilinear peripheral contours. The parenchyma is isoechoic relative to the spleen and exhibits mild heterogeneity. No distinct focal lesions are observed. Hepatic vasculature and biliary tracts are of normal volume with no evidence of congestion.

The **gall bladder** is moderately distended. The wall is normal in thickness. A large amount of aggregated, echogenic suspended sludge, in a stellate pattern is observed within the lumen. The cystic and common bile ducts are normal/not seen. The mesentery effacing the serosal surface is mildly hyperechoic.

Gastrointestinal
The **gastric lumen** is mildly to moderately distended with ingesta. The gastric wall is normal in thickness with a normal layering pattern. The small intestinal lumen is not dilated. The small intestinal wall thickness is normal with a normal layering pattern and appropriate mural detail. Discreet masses are not identified. The colonic wall is normal. There is no evidence of an obstructive pattern.

Pancreas
The right limb of the **pancreas** is visible with normal curvilinear peripheral contours. The parenchyma is largely isoechoic relative to surrounding omental fat and slightly mottled in appearance. The pancreatic duct is visible but not overtly dilated. There is no evidence of peripancreatic inflammation or effusion.

Free Abdomen
There is no obvious evidence of free fluid. The abdominal **lymph nodes** are normal/not visible.

Other
The testicles are subjectively normal in size (**left testicle** is 2.64 x 1.18 cm; **right testicle** is 2.78 x 1.24 cm) and symmetrical with smooth peripheral contours. The parenchyma is slightly mottled in appearance bilaterally. No distinct focal lesions are observed.

A **brief echocardiogram** reveals no evidence of pericardial effusion.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- Gall bladder changes are consistent with a fully formed mucocele. The adjacent peritonitis may be secondary to concurrent cholecystitis or impending rupture. Correlation with the patient's liver values is recommended.

- Nonspecific diffuse hepatopathy. Differentials include inflammatory disease, hepatotoxicosis (i.e., copper), other hepatopathy +/- concurrent age-related change (i.e., regenerative nodular hyperplasia or vacuolar hepatopathy).

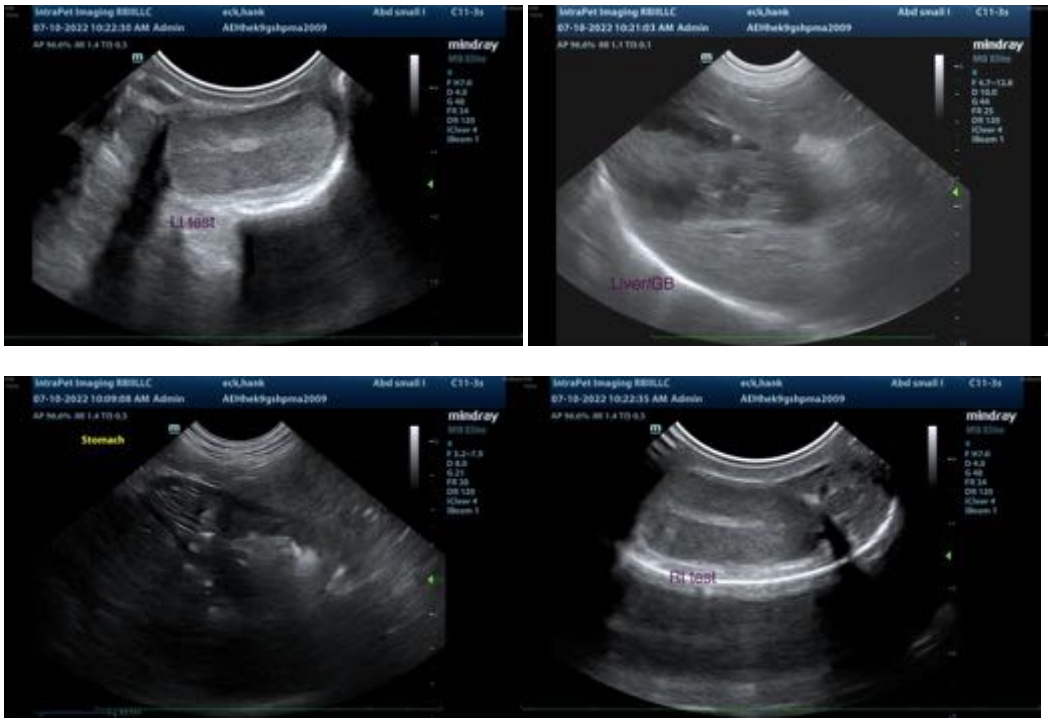
Secondary Findings

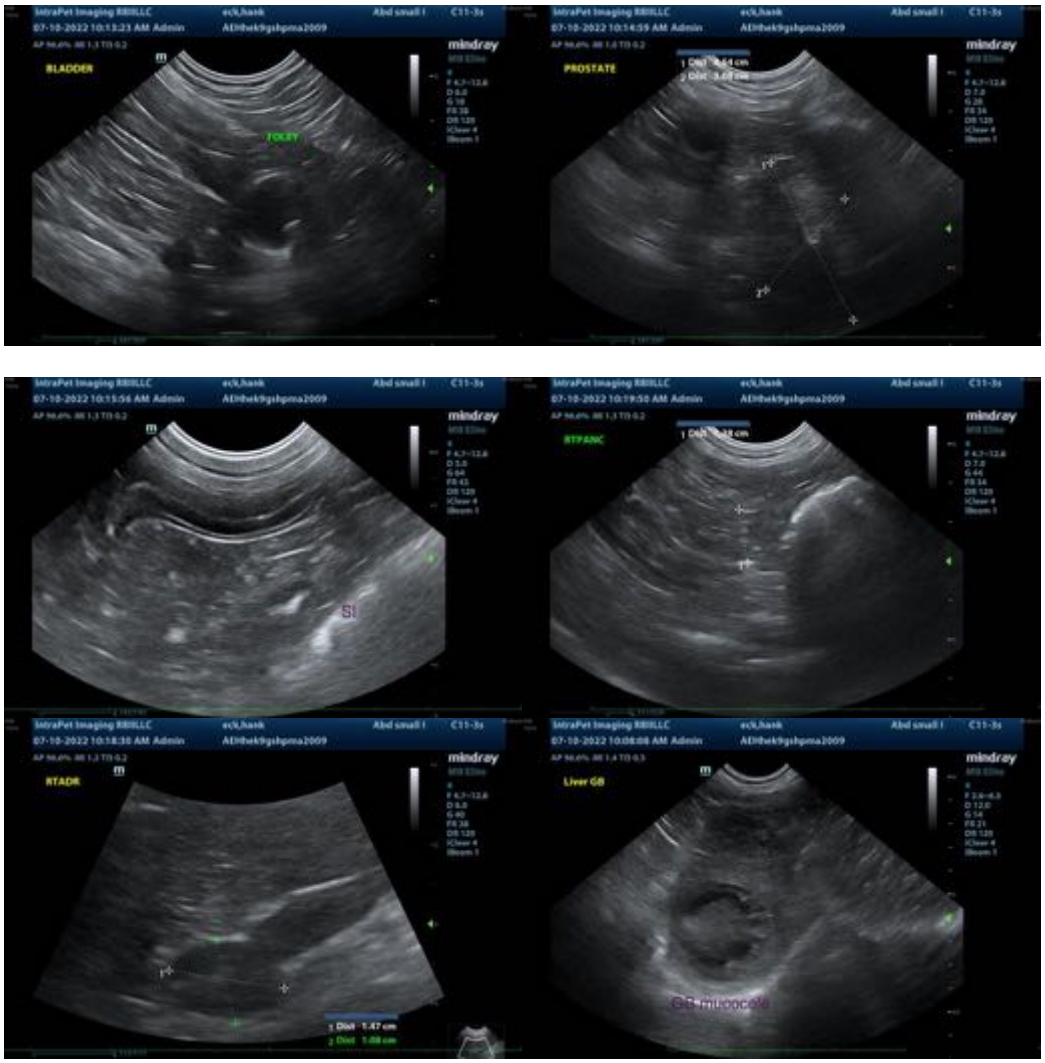
- The splenic parenchymal changes trends toward the benign (i.e., lymphoid hyperplasia, extramedullary hematopoiesis or similar). Neoplasia is possible but considered less likely.

- Bilateral, chronic, age-related renal changes
- The pancreatic changes are most consistent with age-related parenchymal remodeling, potentially secondary to a prior inflammatory episode, early fibrosis or chronic pancreatitis
- The prostate changes are most consistent with benign prostatic hyperplasia. Bacterial prostatitis is also a differential but considered unlikely in the absence of lower urinary tract signs.
- The testicular parenchymal changes are most consistent with age-related remodeling.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- Baseline lab work, including a CBC Chemistry panel, urinalysis and T4 is recommended, if not already performed.
- Given the gall bladder changes, a cholecystectomy should also be considered, particularly if the liver enzymes and the white blood cell count are elevated. If pursued, a liver biopsy should also be obtained. Castration can also be considered at the time of surgery, if the patient is stable under anesthesia. Consider referral to a board-certified surgeon if a cholecystectomy is pursued, due to the potential for perioperative complications. Thoracic radiographs are recommended to assess cardiopulmonary status prior to anesthesia. In the meantime, empirical treatment for cholecystitis (i.e., broad-spectrum antibiotics, pain medication and supportive care) is recommended.
- Also consider a GI panel (serum cobalamin and folate, TLI and PLI) particularly if the patient has a history of gastrointestinal signs.





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.

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