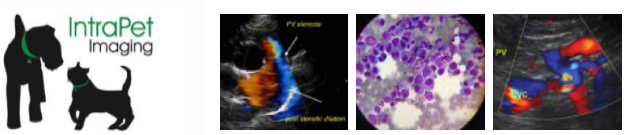
IMAGING PERFORMED BY

IntraPet.com



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DATE

8/29/22

PATIENT

Jasper Smith

SPECIES

Canine

BREED

Golden Mix

SEX

Male, intact

AGE

2/5/2011

WEIGHT

28.2 lbs.

INTERPRETED BY

Andrea Nicastro, DVM, Diplomate ACVIM (*Small Animal Internal Medicine*)

HOSPITAL NAME

Animal Emergency Hospital

REFERRING VET

Dr. Kalwa

INVOICE

13888

PRESENTING CLINICAL SIGNS

PC: - Diarrhea + blood - Vomiting - Lethargy ATO- - Owned 10 yrs, at least 11 yrs old- unsure age- an adult when purchased from person on craigslist. Has always been healthy- no medical hx. - Though older has been very active, acting puppy like up until last sunday. - Clinical signs started 7 days ago- vomiting, diarrhea then improved - Monday- sluggish; tuesday improved; wednesday night- diarrhea with blood, thursday/ friday ok, saturday sluggish - Today, sunday- vomited 3x drinking has been normal; unsure if any change in urination- goes outside. no weight change. no coughing or sneezing Not UTD on heartworm, has flea collar No obvious DI- does like to eat thing/people food but nothing was missing, nothing fed to him, nothing seen in back yard, no new treats/ diets. Feeds pedigree adult O has 3 dogs- he has always been healthy; 2 other dogs more sick, one has diabetes- has been diagnosed here
ALT 623, ALP 607, T-bili 4.3, 1+ proteinuria, 3+ bilirubinemia, inactive sediment, white count 48,000 with a mature neutrophilia and monocytosis, possible thrombocytopenia, 4DX negative.

Current Medications: Pending.
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 wall is contracted. A Foley catheter is observed within the lumen. The bladder wall is of appropriate thickness for the level of repletion. Luminal contents are anechoic. No cystic calculi are observed.

The prostate is enlarged (2.84 cm in width) with a relatively normal shape. The parenchyma is largely hyperechoic relative to surrounding omental fat and subtly heterogeneous in appearance. No distinct focal lesions are observed. The prostatic urethra is not overtly dilated.

The left kidney is normal size (5.99 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with mild loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The right kidney is normal size (6.05 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. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

Adrenal Glands

The left adrenal gland is normal size (0.45 cm at cranial pole) (0.54 cm at caudal pole) (2.00 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 normal size (1.34 cm at cranial pole) (0.50 cm at caudal pole) (2.14 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.

Spleen

The spleen is normal in size (1.37 cm in width at the level of the hilus) with a normal capsular contour. There is appropriate echogenicity and echotexture. No focal lesions are observed. Splenic vasculature is normal.

Liver

The liver is subjectively normal in size with normal curvilinear peripheral contours. The parenchyma is hypoechoic relative to the spleen and homogeneous in appearance. There is a subtle increase in portal markings. Vascular and biliary tracts are of normal volume with no evidence of congestion. The mesentery surrounding the liver is hyperechoic. The gall bladder lumen is distended. The wall is mildly thickened (up to 0.28 cm) and hyperechoic. A moderate amount of aggregated echogenic debris is adhered to the luminal surface. The mesentery surrounding the gallbladder is hyperechoic. In some regions, it is difficult to discern the wall from the sludge itself. The cystic and common bile ducts are normal/not seen.

Gastrointestinal

The stomach and intestine are free of stasis and exhibit normal peristaltic activity. The gastric lumen is not distended. The gastric wall and pylorus are normal in thickness with a normal layering pattern. The pyloric outflow tract is patent. 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. No obstructive disease is noted.

Pancreas

The base and 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. A 1.76 cm irregular, slightly cystic lymph node is observed in the right cranial quadrant. In addition, 1-2 prominent mesenteric lymph nodes are seen, the largest measuring 1.80 cm in length.

Other

The testicles are subjectively normal in size (left testicle 2.28 x 1.25 cm; right testicle 2.44 x 1.52 cm) and symmetrical with smooth peripheral contours. The left testicular parenchyma is homogeneous. Within the right testicle, a 1.37 x 1.33 cm isoechoic to slightly heterogeneous nodule is present.

ULTRASONOGRAPHIC FINDINGS

Primary Findings:

- The clinical history and hepatic changes are concerning for an acute hepatopathy. Differentials include inflammatory disease (i.e., bacterial cholangiohepatitis), hepatotoxicosis, leptospirosis, infiltrative neoplasia (less likely), other.
- The gallbladder wall changes are consistent with cholecystitis.
- Cranial peritonitis is present, likely secondary to hepatobiliary pathology.

Secondary Findings:

- Bilateral, age-related degenerative 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 abdominal lymphadenopathy could be consistent with benign reactive change or less likely, emerging neoplasia.

- 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 left testicular nodule could be consistent with age-related remodeling or an emerging tumor.

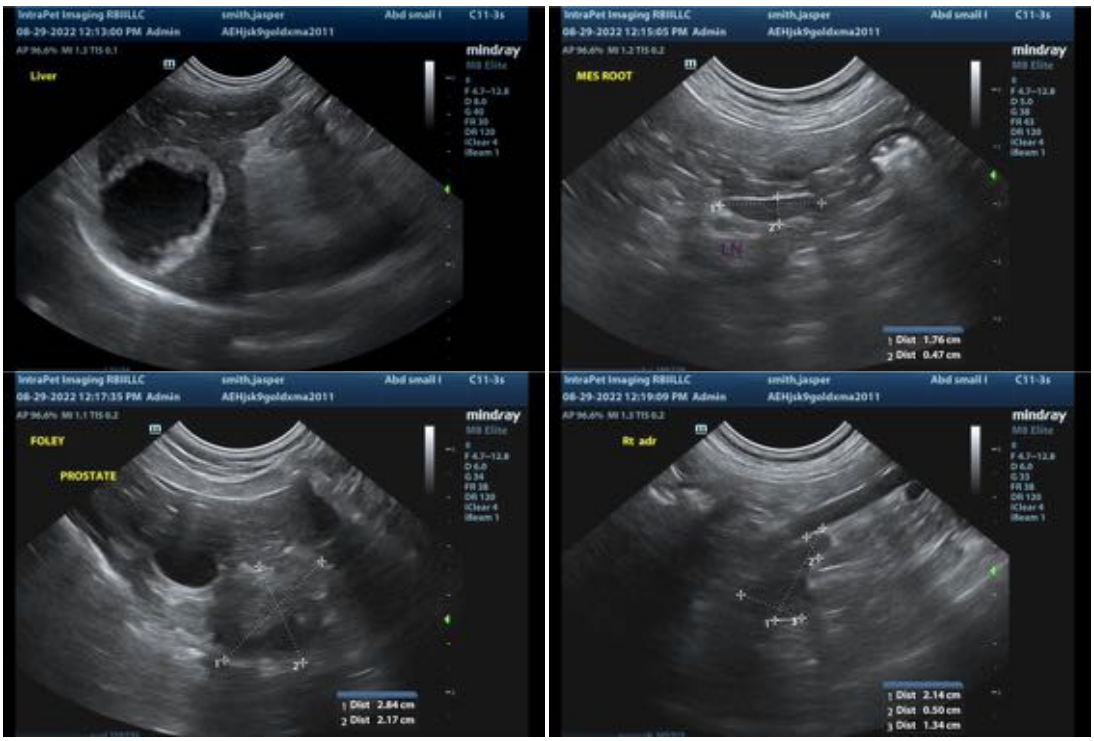
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

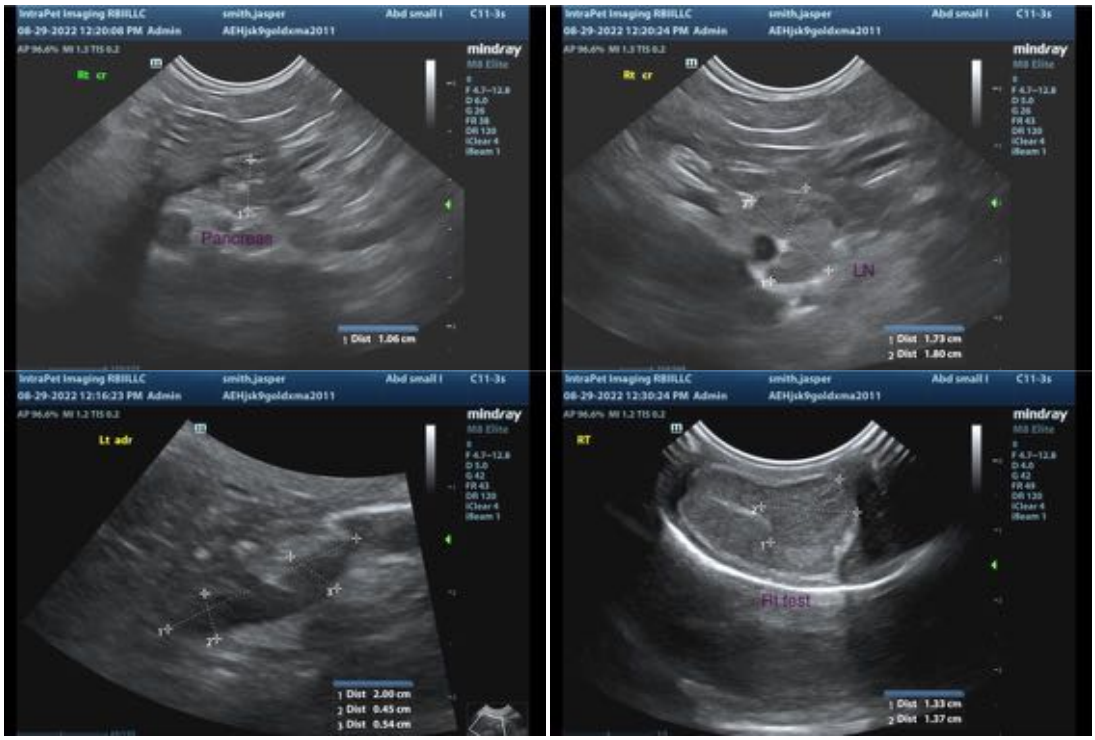
- Leptospirosis testing (i.e., blood and urine PCR, serology).

- Consider hepatic tissue sampling (i.e., fine needle aspirate or surgical biopsy). Surgical biopsies are more likely to be representative of global organ pathology. If pursued, aerobic and anaerobic bile cultures are recommended along with acquisition of additional hepatic tissue samples for potential copper quantitation. Also consider castration with submission of the testicles for histopathology. Clotting times (i.e., PT/PTT) are also recommended to assess for the presence of a coagulopathy, particularly if hepatic tissue sampling is performed.

- While awaiting test results, supportive care for bacterial cholangiohepatitis/Leptospirosis is recommended including fluid therapy, broad spectrum antibiotics, gastric protectants, antiemetics and pain medication as needed. Serial sonographic monitoring of the liver and gallbladder is recommended, particularly if the patient does not respond to aggressive supportive care.

- Given the patient's age, three-view thoracic radiographs are recommended to assess cardiopulmonary status.





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.

Andrea Nicastro, MPH, DVM, Diplomate DACVIM (Small Animal Internal Medicine)
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