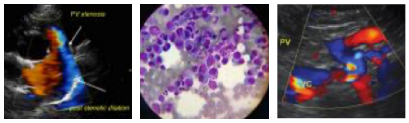
IMAGING PERFORMED BY

IntraPet.com



SonoPath
Clinical Sonography & Telecytology
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DATE

4.14.23

PATIENT

Jax Graci

SPECIES

Canine

BREED

Puggle

SEX

Neutered Male

AGE

8/18/2010

WEIGHT

31.6 lbs

INTERPRETED BY

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

HOSPITAL NAME

Bel Air VH

REFERRING VET

Dr. Schmidt

INVOICE

12762

PRESENTING CLINICAL SIGNS

Feb 2023 dx diabetes mellitus. 4/10/23- not eating few days, vomiting.

Current Medications: Vetsulin 7 units BID.
Lab Results: ALT 3615.
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.
Imaging Performed By: Stephanie Warga RDCS, RVT.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder wall is normal in thickness and the mucosal surface is smooth. The bladder is moderately distended. Luminal contents are mostly anechoic. No cystic calculi are observed. The region of the trigone and the proximal urethra, visible to a depth of 2 cm, are normal.

The prostate is normal in size (0.76 cm in width) and shape. Parenchyma is homogenous. The prostatic urethra appears normal without evidence of dilation or obstruction.

The left kidney is normal in size (5.81 cm in length) with a normal shape, architecture and smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio mild loss of normal corticomedullary distinction. An ill-defined hyperechoic medullary band is observed at the corticomedullary junction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The right kidney is normal in size (5.64 cm in length) with a normal shape, architecture and smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio mild loss of normal corticomedullary distinction. An ill-defined hyperechoic medullary band is observed at the corticomedullary junction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

Adrenal Glands

The left adrenal gland is prominent in size at the cranial pole (0.82 cm) and normal in size at the caudal pole (0.66 cm) (1.69 cm in length) with smooth curvilinear peripheral contours. 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 in normal size (0.62 cm at cranial pole) (0.57 cm at caudal pole) (1.35 cm in length) with a normal shape and 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 subjectively normal in size with a normal capsular contour. There is appropriate echogenicity and echotexture. Numerous pinpoint to slightly linear hyperechoic to mineralized foci are observed throughout the organ. One to two small ill-defined myelolipomas are also obstruction in the region of the hilus. Splenic vasculature is normal.

Liver

The liver is subjectively enlarged with swollen peripheral contours. The parenchyma is hyperechoic relative to the spleen and somewhat attenuating. The parenchyma is subtly mottled in appearance, with a few ill-defined hypoechoic nodules (the largest measuring 0.76 cm in diameter). Hepatic vasculature and intrahepatic biliary tracts are of normal volume with no evidence of congestion.

The gall bladder lumen is moderately distended. The wall is thin and smooth. A moderate to large amount of aggregated, echogenic, partially dependent sludge is observed within the lumen. 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 is normal in thickness 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 is prominent in size with slightly irregular peripheral contours. The parenchyma is largely isoechoic relative to surrounding omental fat and diffusely mottled in appearance, with several ill-defined hypoechoic nodules/areas. The pancreatic duct is not overtly dilated. The left limb is unremarkable.

Free Abdomen
The peritoneal cavity is normal. There is no evidence of inflammation or effusion. The abdominal lymph nodes are normal/not visible.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- The hepatic parenchymal changes could be consistent with diabetic hepatopathy, inflammatory disease (i.e., bacterial cholangiohepatitis, chronic hepatitis), hepatotoxicosis (i.e., copper), Leptospirosis, infiltrative neoplasia, regenerative nodular hyperplasia, other hepatopathy, or some combination thereof.

- The gall bladder changes could be consistent with cholestasis, fasting or an emerging mucocele.

Secondary Findings

- The bilateral renal changes are most consistent with a diabetic nephropathy.

- The splenic dystrophic mineralization is typically a benign incidental finding, often seen with endocrinopathies.

- The pancreatic changes are most consistent with age-related parenchymal remodeling, potentially secondary to a prior inflammatory episode, early fibrosis or chronic pancreatitis.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

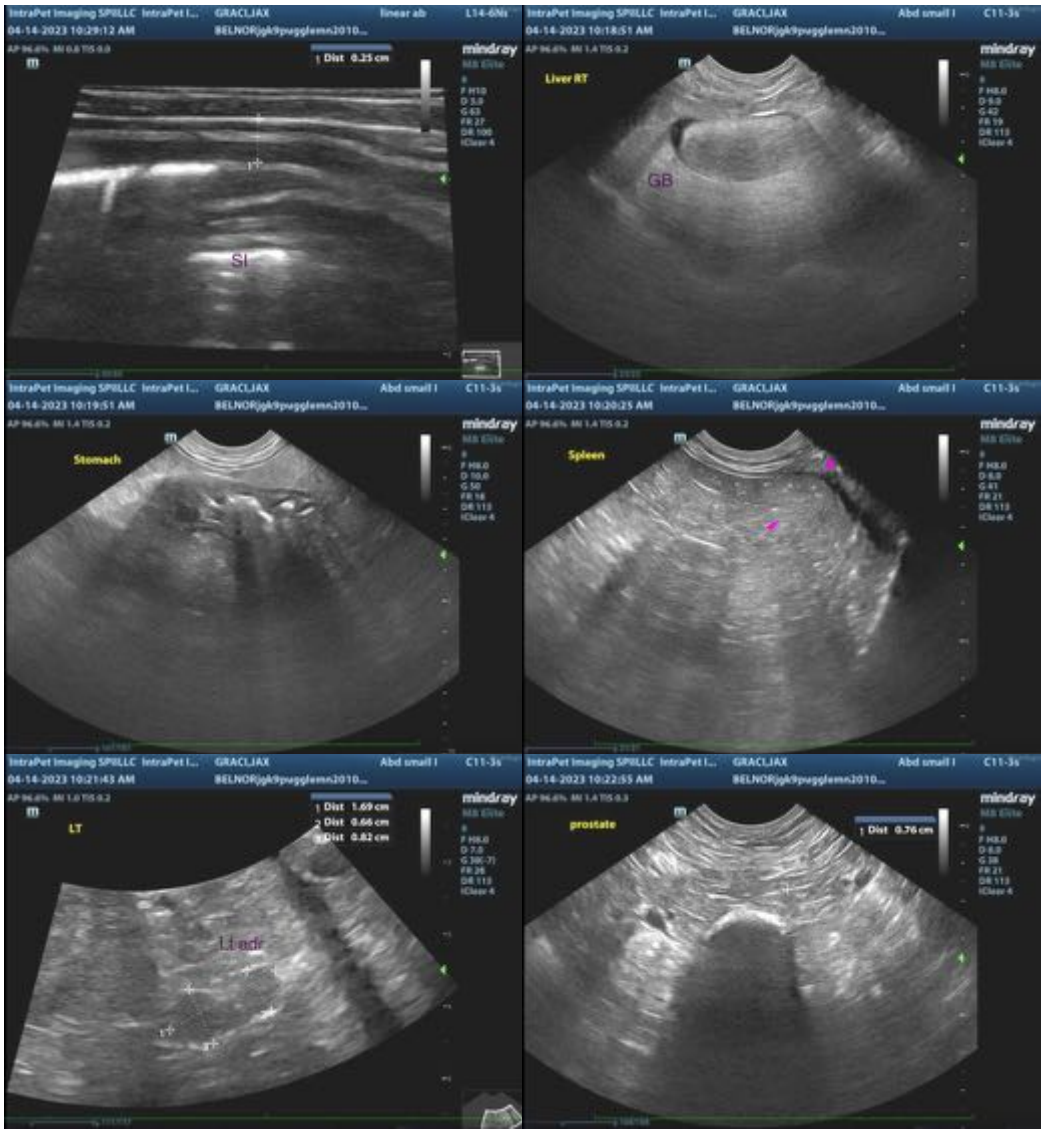
- Consider pre-and postprandial serum bile acids and Leptospirosis testing (i.e., blood and urine PCR, serology)

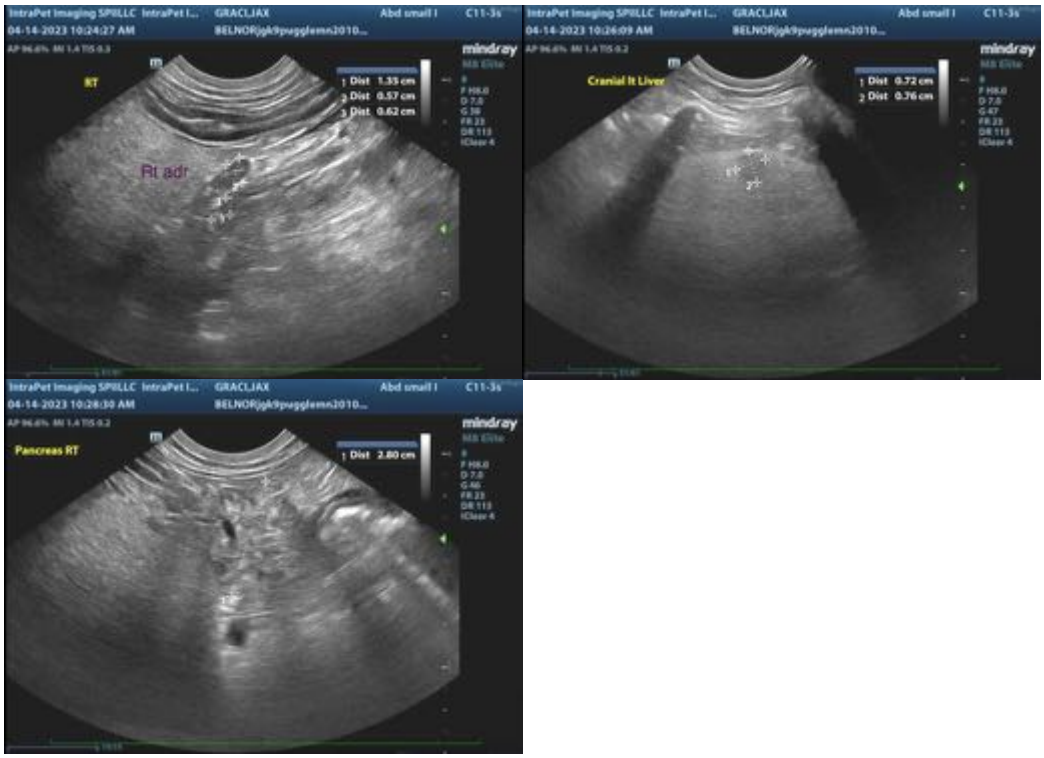
- Cytologic evaluation of the liver should be considered in this patient if clotting status is appropriate. A fine needle aspirate using a 25-gauge needle is recommended. If cytologic evaluation is inconclusive,

consider a surgical liver biopsy with aerobic and anaerobic bile cultures and acquisition of additional hepatic tissue samples for copper quantitation.

- If a more conservative approach is desired, consider empirical treatment for cholangiohepatitis/Leptospirosis with amoxicillin-clavulanic acid along with hepatic antioxidants. If liver values do not begin to improve within 7-10 days of initiating therapy, antibiotics should be discontinued and hepatic tissue sampling reconsidered. If values do improve, a 4–6-week course of treatment is recommended.

- Given the gall bladder changes, serial sonographic monitoring (i.e., every 3 months) is recommended to assess for possible progression to a mucocele. Ursodiol therapy can also be considered for its choleretic effects.





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.

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