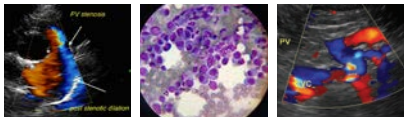
IMAGING PERFORMED BY

IntraPet.com



SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
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DATE

10/25/22

PATIENT

Beamer Carter

SPECIES

Canine

BREED

Pomeranian

SEX

Neutered Male

AGE

3/1/11

WEIGHT

11.2 Pounds

INTERPRETED BY

Beth Johnson, DVM DACVIM

IMAGING PERFORMED BY

Stephanie Warga RDCS, RVT

HOSPITAL NAME

Perry Hall AH

REFERRING VET

Dr. Baer

INVOICE

42336

PRESENTING CLINICAL SIGNS

Intermittent hindlimb weakness and some blood clots in urine on predental blood work mild nonregenerative anemia, hypoglycemia, hypoalbuminemia and low t4. Bile acids and thyroid panel wnl.

Current Medications: None listed.
Lab Results: 10/12/22 CBC: HCT (L) 30.7, HGB (L) 10.3, Plt clumping manual scan revealed adequate platelets. Chem 27: Glu (L) 45, Alb (L) 2.3
Glob (H) 5.2, Alb/glob (L) 0.4, T4(L) 0.9. 10/19/22: Bile acids pre and post WNL. MSU panel: Cortisol (H) 122, TT4 (L) 4, TT3 (L) 0.5, Free T4ED 12 wnl
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

Urinary bladder is adequately distended. It has a normal uniform wall thickness. Contents include anechoic fluid with a large amount of echogenic suspended debris. Both sterile inflammation as well as urinary tract infection can also present with echogenic debris. No masses or cystoliths are observed. The 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.

The right kidney is normal in size (4.18 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia or infarcts observed. Non-obstructive areas of mineralization/nephroliths are noted.

The left kidney is small (3.5 cm), irregular and diffusely echogenic with decreased corticomedullary distinction and poor visualization of internal architecture. There is no evidence of pyelectasia or infarcts observed. Non-obstructive areas of mineralization/nephroliths are noted.

Adrenal Glands

The right adrenal gland is normal in size (1.26 cm long x 0.44 cm at the cranial pole and 0.30 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 (1.34 cm long x 0.33 cm at the cranial pole and 0.37 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 (swollen contour) without disruption of architecture. It has a normal homogenous echotexture. Parenchyma is diffusely hyperechoic characterized by less prominent than normal portal vein walls and increased echogenicity relative to the spleen and falciform fat. No focal lesions are observed. 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 visible stomach wall is normal in thickness and layering. The lumen of the stomach is mildly distended with very echogenic reverberation artifact from intraluminal gas. There is no evidence of obstruction, foreign material or infiltrative disease; however, complete visualization of far wall is partially inhibited by gas. 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.

A small hypoechoic medial iliac/sublumbar lymph node is noted, measuring approximately 0.80 cm x 0.60 cm.

ULTRASONOGRAPHIC FINDINGS

- **Large amount of echogenic urinary bladder debris** - consistent with reported hematuria.
- Bilateral non-obstructive nephroliths with evidence of decreased architecture/chronic kidney disease in the left kidney.
- **Hyperechoic hepatomegaly -** This appearance is non-specific and most consistent with a benign steroid (endocrine) or vacuolar hepatopathy or reactive or idiopathic hepatopathy. Inflammatory and/or infiltrative disease (such as round cell neoplasia) are also possible, but considered less likely.
- **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.
- **Reactive medial iliac lymph nodes –** infiltrative neoplastic disease cannot be ruled out but is considered less likely.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Given the presentation of weakness combined with hypoglycemia, hypoalbuminemia, etc., recommendations initially include rechecking the blood glucose to ensure that the hypoglycemia was not lab error or due to a sample sitting. If the hypoglycemia is confirmed, recommendations include an insulin to glucose paired ratio at a time when the glucose is <50.

Additionally, given the concurrent hypoalbuminemia, further investigation of possible gastrointestinal disease as a cause is recommended, beginning with an a gastrointestinal malabsorption panel (including cobalamin, folate, TLI and PLI) to Texas A&M GI Laboratory for further evaluation of GI and pancreatic function.

A fecal exam is also recommended.

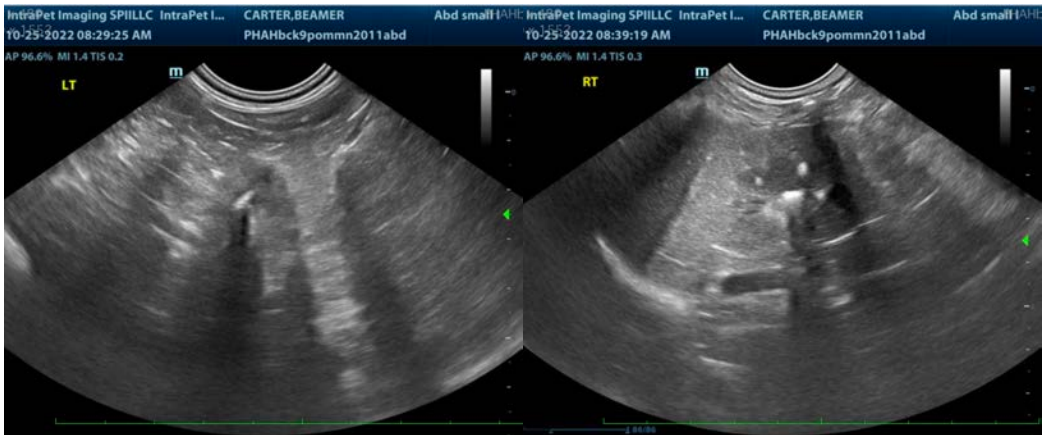
A urine culture is recommended on a sterile urine sample.

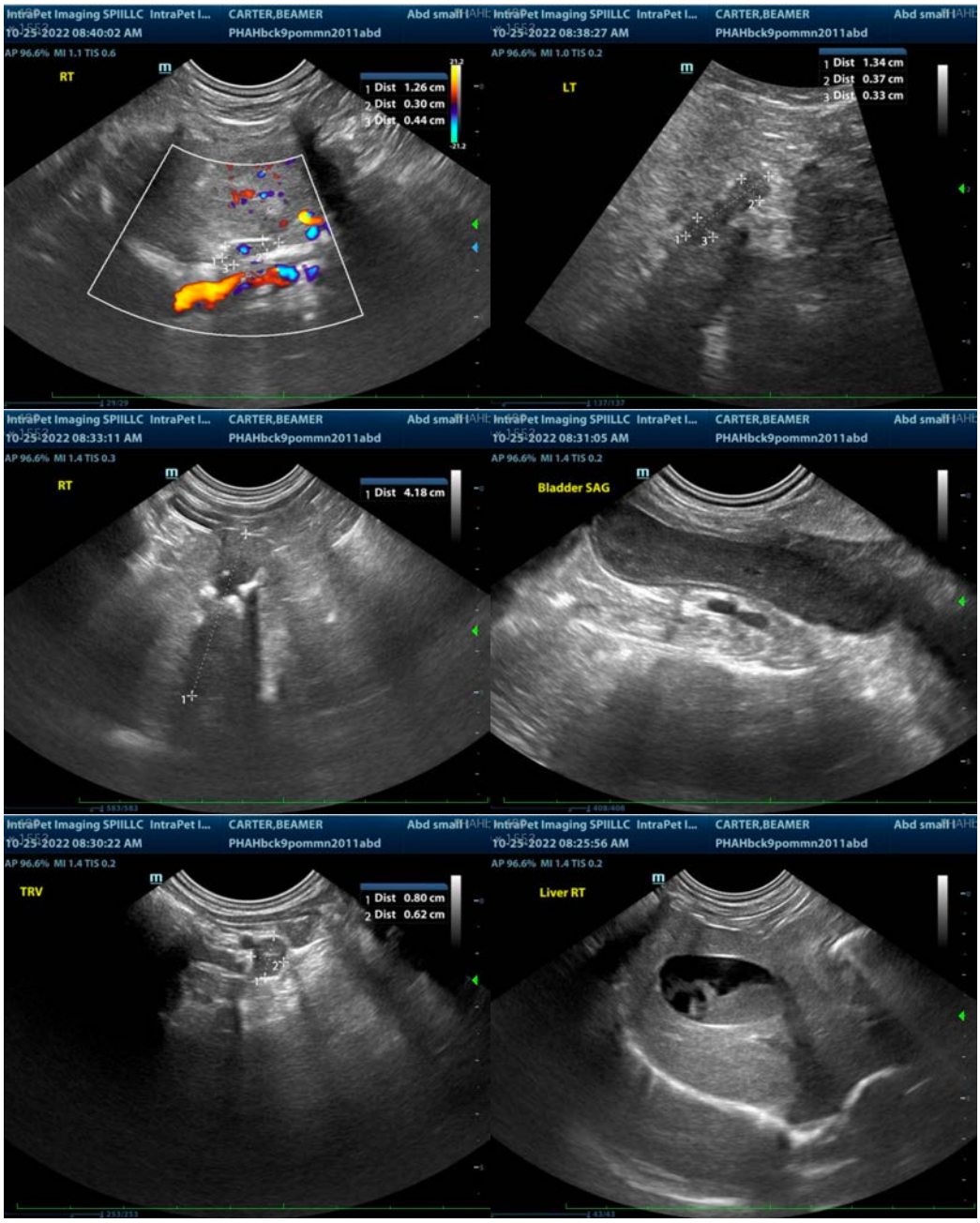
In the meantime, empirical deworming with a 5-day course of Panacur is recommended in addition to breaking up the patient's daily caloric intake into small frequent meals throughout the day while awaiting further results.

Blood pressure is also recommended if not recently evaluated.

Full evaluation of this patient's coagulation status is recommended to rule out a coagulopathy as the cause of hematuria.

If the weakness ultimately cannot be related to hypoglycemia and/or anemia, etc., further neurologic evaluation is recommended.

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RT
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2 Dist 0.30 cm
3 Dist 0.44 cm
IntraPet Imaging SPIILLC IntraPet I... CARTER,BEAMER Abd small HAHE
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LT
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3 Dist 0.33 cm
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Bladder SAG
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TRV
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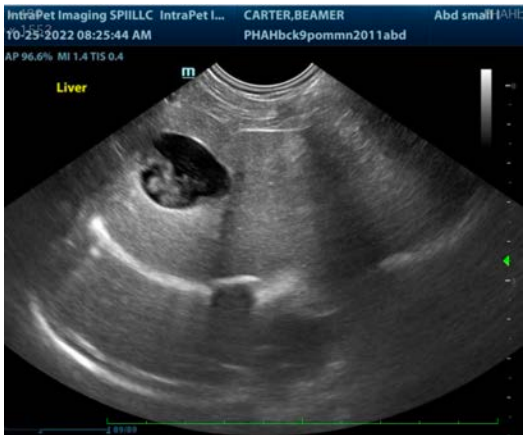
Liver RT



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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