

**DATE PRESENTING CLINICAL SIGNS**

5/25/2022

History: 2 months ago patient presented for vomiting, lethargy, lameness. in 2019 had severe Lyme dz. Patient is already on Benazepril. Now continuing work on multiple slightly abnormal bloodwork values--see below

PATIENT

Chanel McGarvey

Current Medications: Benazepril Benazepril 1mg/mL susp Chicken flavor - Give 0.4mL by mouth, Metacam 0.5mg/ml 3# dose SID (started after issues, not prior to elevated SDMA, low protein)

SPECIES

Lab Results: Bloodwork 4/6/22: CHEM: SDMA 19 H, Crea 0.7 N, BUN 25 N, TP 5.1 H, Alb 2.6 LOW. UA - USG 1.036 (adequate), 2-5 WBC, 0-2 RBC, Bil 1+, neg protein, neg glu, pH 6.0, no bacteria, no crystals, neg ket

Canine

UPC = 0.1 = normal; non proteinuric. Bloodwork 5/2/22 glu=60, SDMA=25, Crea=0.8 BUN=28; alb=2.5 glob=2.3. 5/5/22--TAMU GI panel-all wnl. 5/13/22 cortisol =6.4, Bile acids pre=36.7 post= 2.5; patient is doing well at home clinically.

BREED

Maltese

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

SEX

Spayed Female

Imaging Performed By: Andi Parkinson, BS RDMS.

AGE

9/4/2009

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**WEIGHT**

3.1 lbs

Urinary System

The urinary bladder, trigone, and pelvic urethra are normal in thickness and the mucosal surface is smooth. The bladder lumen is moderately distended with anechoic urine. No masses, inflammatory changes or calculi are observed. The cystourethral junction and the visible portion of the proximal urethra are normal.

INTERPRETED BY

Andrea Nicastro,
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The left kidney is normal size (2.52 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. A few, nonobstructive nephroliths are visualized. There is no evidence of pyelectasia, infarcts or hydroureter.

The right kidney is normal size (2.20 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. A few, nonobstructive nephroliths are visualized. There is no evidence of pyelectasia, infarcts or hydroureter.

HOSPITAL NAME

PetVet of Clarksville

Adrenal Glands

The left adrenal gland is normal size (0.33 cm at cranial pole) (0.42 cm at caudal pole) (1.40 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.

REFERRING VET

Dr. Martof

The right adrenal gland is normal size (0.30 cm at cranial pole) (0.28 cm at caudal pole) (1.38 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.

INVOICE

10952

Spleen

The spleen is normal in size (0.99 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 contours and structure. There is appropriate echogenicity and echotexture. No overt structural evidence of inflammatory, infiltrative, or regenerative pathology is evident. Vascular and biliary tracts are of normal volume with no evidence of congestion. No pathological hepatic lymphadenopathy observed. The portal vein to caudal vena cava ratio is approximately 1: 1.

The gall bladder lumen is moderately distended. The wall is thin and smooth. A moderate amount of aggregated, echogenic to mineralized debris/sludge, +/- distinct choleliths 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 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 right limb of the pancreas is normal in size 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

The peritoneal cavity is normal. There is no evidence of inflammation or effusion. One to two prominent mesentery lymph nodes are visualized, the largest measuring 0.97 cm in length.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- Bilateral, chronic renal changes with nonobstructive nephrolithiasis
- Mild, age-related pancreatic remodeling
- Reactive lymph nodes

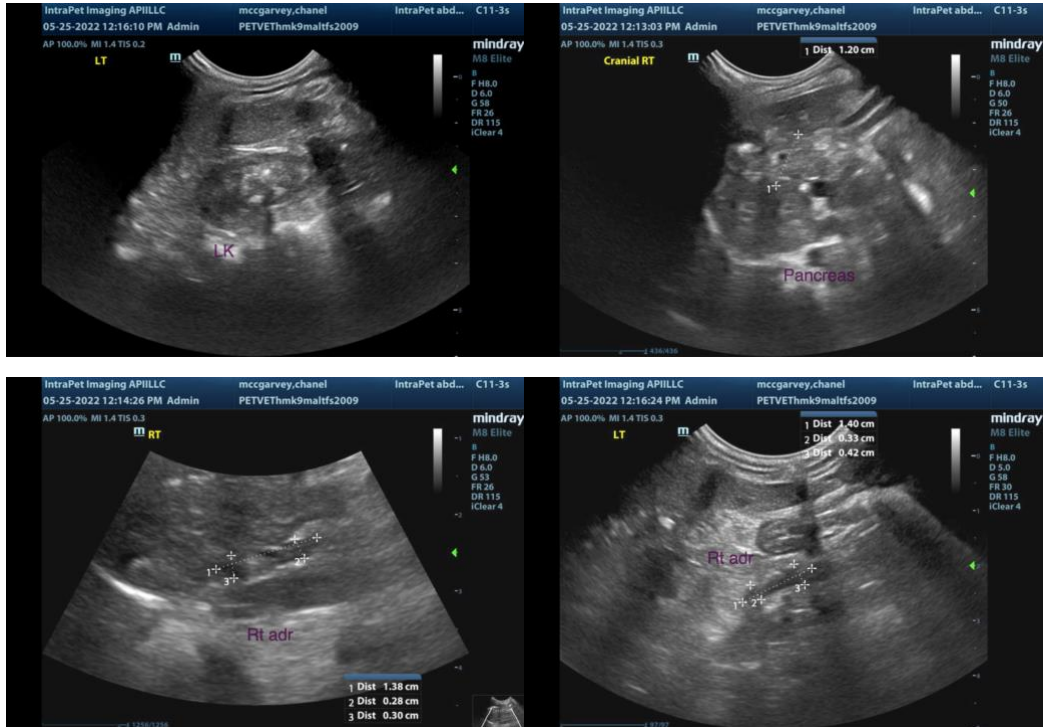
*An obvious cause for the patient's clinical signs is not identified in this study. Given the patient's lab results, a protein-losing enteropathy and/or hepatic dysfunction are possible etiologies. Other considerations include occult pyelonephritis, other underlying metabolic disease, other.

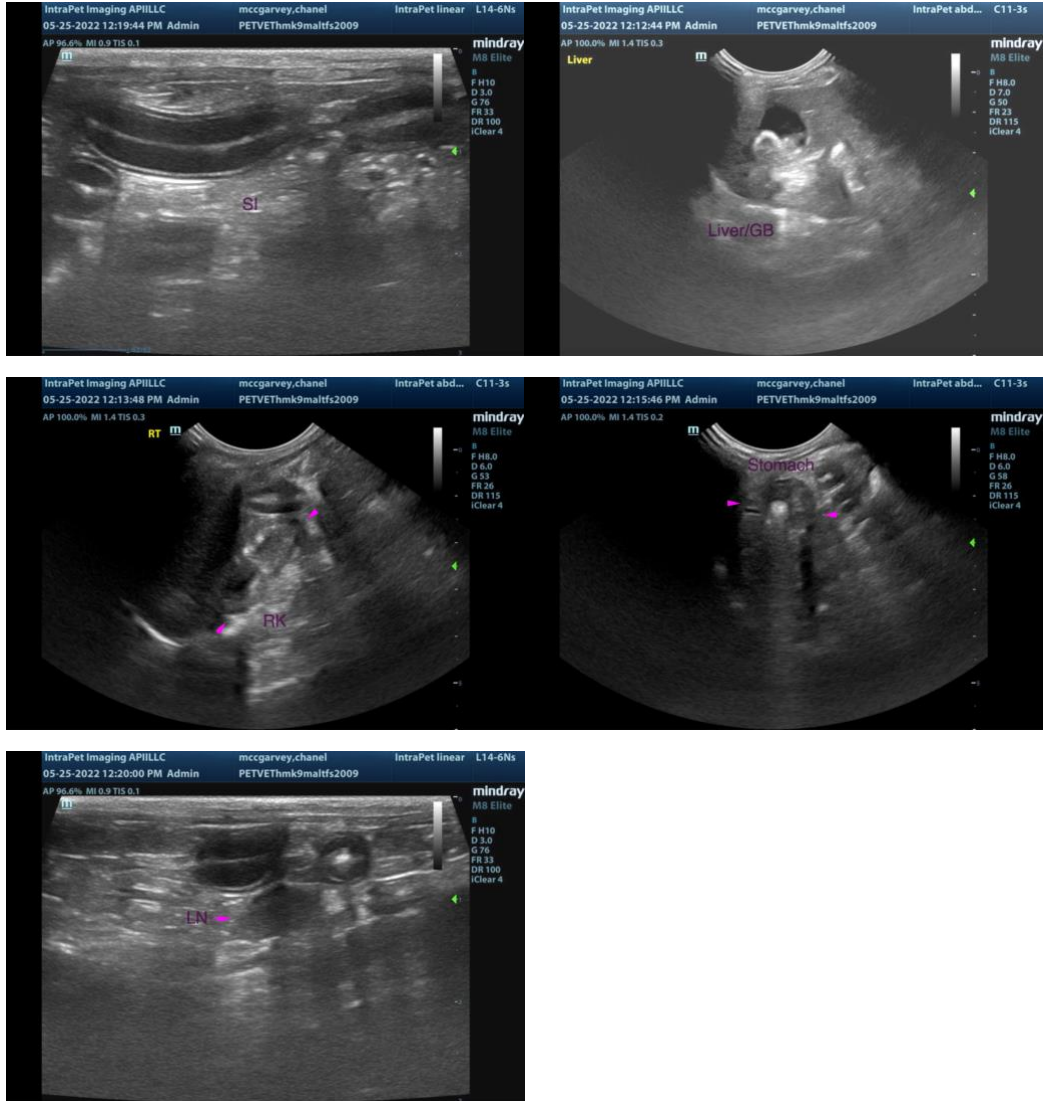
Secondary Findings

- The lymph node changes are most consistent with reactive lymphadenitis or lymphoid hyperplasia.
- Mineralized gall bladder debris +/- small choleliths - incidental.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- Given the hypoglycemia, a recheck blood glucose on a glucometer is recommended to determine if this finding is persistent. If so, consider further workup (i.e., insulin:glucose ratio).
- Regarding the GI signs, consider the following:
 1. Fecal evaluation for ova and Giardia
 2. 6-week limited antigen diet trial
 3. If the above diagnostic/therapeutics are inconclusive and clinical signs persist or recur, gastrointestinal +/- hepatic biopsies may be warranted.
- Given the elevated SDMA and sonographic renal changes, consider a urine culture and sensitivity to assess for occult pyelonephritis.





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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