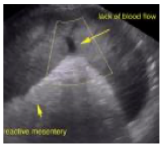
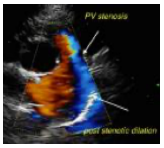
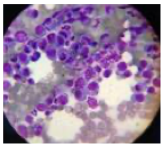
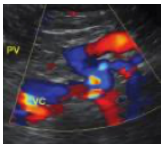
SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™

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1-800-838-4268 info@sonopath.com

PATIENT
Tater Nash

SPECIES
Canine

BREED
Chihuahua

SEX
Neutered Male

AGE
15 years

WEIGHT
2.76 kg

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

IMAGING PERFORMED BY
Kristin Peterson

HOSPITAL NAME
Wilvet Salem

REFERRING VET
Kristin Peterson

INVOICE
11285

DATE
7.29.22

PRESENTING CLINICAL SIGNS

History
P has chronic kidney DZ. P has been doing very well until a few days ago. P was nauseous the last few days. P did not want to eat so O tried a different canned food. P did V that up. Next day P V one more time. Today P V again and so O called RDVM for appointment and then went back and found 3 more piles of V and one had blood in it so O came in here. O thinks P has been drinking well still. P did have one bout of semi soft stool yesterday. Hasn't really wanted to eat since all this started. O gave Cyproheptadine PRN (last night) for APP which helped a little. Energy levels seem normal

Abnormal PE/Chem/CBC/UA Results
EPOC - Azotemia CREA 2.09, BUN 42, rest wnl
CBC - HCT 52.4%, Stress leukogram Lymphopenia 1.04k,
Chem17 - Azotemia CREA 2.0, BUN 50, ALT 129, ALP 15, Amylase 2049
UA - USG 1.022, pH 7.0, wbl < 1/hpf, rbc 10/hpf,

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System
The **urinary bladder** is mildly distended with anechoic urine. The wall at the region of the apex is mildly thickened (0.34 cm) with an irregular mucosal surface. The wall tapers to a normal thickness as it extends towards the cystourethral junction. No cystic calculi are observed. The region of the trigone is normal.

The **prostate** is normal in size (0.86 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 (2.51 cm in length) with a slightly irregular shape, smooth peripheral margins, and normal internal architecture. There is moderate loss of corticomedullary distinction. Several hyperechoic shadowing diverticular foci are observed. A few, small cortical cysts are seen. Trace pyelectasia is present (0.14 cm in the longitudinal plane). There is no evidence of hydroureter. Renal vasculature is normal.

The **right kidney** is normal size (2.45 cm in length); with a slightly irregular shape. The cortex is variably thickened. There is moderate loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, or hydroureter. Renal vasculature is normal.

Adrenal Glands
The **left adrenal gland** is normal size (0.32 cm at cranial pole) (0.50 cm at caudal pole); 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 region of the **right adrenal gland** is evaluated. No obvious pathology is observed.

Spleen
The **spleen** is normal in size (0.81 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 with minor changes consistent with age-related remodeling. No focal lesions are observed. Hepatic vasculature and 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 small to moderate amount of partially dependent, echogenic debris/sludge is observed within the lumen. The cystic and common bile ducts are normal/not seen.

Gastrointestinal
The **gastric lumen** is not distended. 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 region of the **pancreas** is isoechoic relative to surrounding omental fat. No obvious parenchymal abnormalities are observed. There is no evidence of regional inflammation or effusion.

Free Abdomen
(See "Other" category)

Lymph nodes
The abdominal **lymph nodes** are normal/not visible.

Other
An area of enflamed fat is visualized in a few video clips. This region is thought to be subcutaneous. However, intra-abdominal involvement cannot be completely excluded.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- Bilateral, chronic, age-related renal changes
- The hepatic changes are consistent with age-related parenchymal remodeling and are not considered clinically significant at this time.

Secondary Findings

- The urinary bladder wall changes are thought to be artifactual due to lack of full repletion. However, cystitis cannot be completely excluded. Correlation with the patient's clinical analysis and urinalysis findings is recommended.
- Suspected enflamed subcutaneous fat. However, reactive mesentery within the abdomen cannot be completely excluded.

*An obvious cause for the patient's clinical signs is not identified in this study. Possible considerations include primary GI disease (i.e., dietary indiscretion, infectious/parasitic disease, food allergy/intolerance), mild pancreatitis, underlying metabolic issue, other.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Given the azotemia, consider the following:

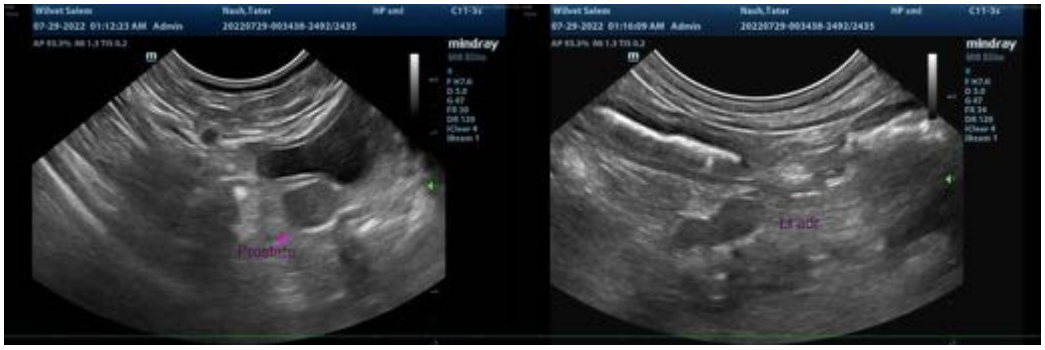
1. Urine culture and sensitivity

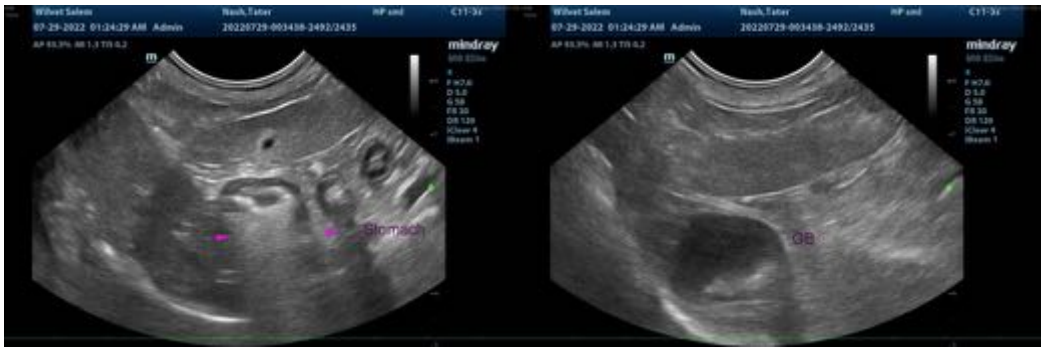
2. Baseline blood pressure measurement
3. Transition to a prescription renal diet when the patient's appetite resumes.

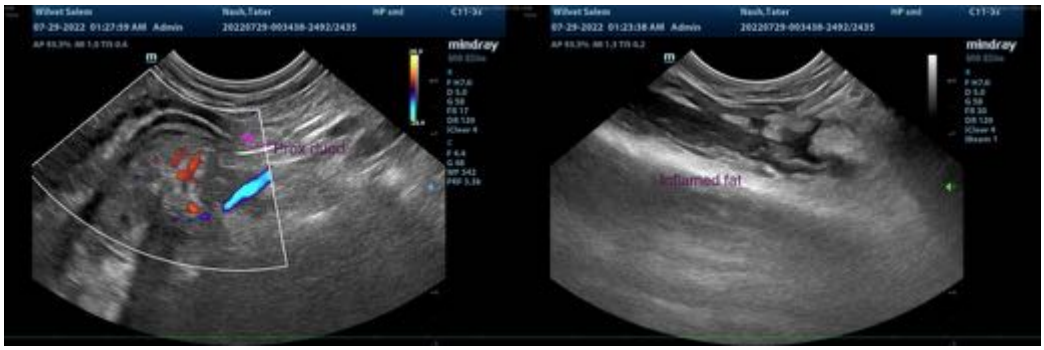
Regarding the GI signs, consider the following:

1. cPLI +/- full GI panel (i.e., serum cobalamin and folate, TLI and PLI)
2. Fecal evaluation for ova and Giardia
3. Three-view thoracic radiographs to assess for occult esophageal disease
4. A resting cortisol level to screen for hypoadrenocorticism. If resting cortisol level is < 2.0 mcg/dl, an ACTH stimulation test is recommended.
5. Supportive care for acute gastroenteritis
6. If the patient does not improve within 48-72 hours of medical management, further work-up (i.e., pre-and postprandial serum bile acids) +/- GI biopsies may be warranted.

Regarding the inflamed fat, this should be correlated with the patient's physical examination findings and evaluated accordingly.







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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