

**DATE PRESENTING CLINICAL SIGNS**

7.6.2023 Patient has had a history of intermittent inappetence and soft stool since adopted from a rescue in 2021. Eats Hills ID low fat and gets Cerenia PO as needed. Will usually fix the issue quickly. has a fractured mandible, most teeth previously extracted, grade 3/6 heart murmur being monitored at CVCA. last labs showed her to be in early renal disease.

**PATIENT**

Trixie Graff  
 Current Medications: Visbiome, Cerenia as needed  
 Lab Results: 7/3: neu 13, plt 646, spg 1.009, prot<15, urea nit 35, SDMA 30.9, BUN/ Creat ratio 44  
 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.

**SPECIES**

Canine

**BREED**

Chihuahua

**SEX**

Female Spayed

**AGE**

5/20/2009

**WEIGHT**

4.6 lbs

**INTERPRETED BY**Beth Johnson, DVM  
DACVIM**HOSPITAL NAME**

DocSide VMC

**REFERRING VET**

Dr. Tierney

**INVOICE**

13593

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN****Urinary System**

Urinary bladder is adequately distended with anechoic contents. No masses, inflammatory changes, echogenic sediment or cystoliths are observed. The urinary bladder, trigone and visible pelvic urethra are normal in thickness with a smooth mucosal surface.

Kidneys are bilaterally small (left 2.72 cm/ right 2.73 cm), irregular and diffusely echogenic with decreased corticomedullary distinction and poor visualization of internal architecture. Pyelectasia is noted in both kidneys (left kidney 0.19 cm pyelectasia in the transverse view) (right kidney 0.25 cm in the transverse view). There is no mineral is observed.

**Adrenal Glands**

Left adrenal gland is normal in size (0.45 cm at cranial pole / 0.50 cm at caudal pole), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

Right adrenal gland is normal in size (0.35 cm at cranial pole / 0.39 cm at caudal pole), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

**Spleen**

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 with mildly irregular margins. Parenchyma is heterogenous characterized by multiple poorly defined hypoechoic nodules within otherwise hyperechoic liver parenchyma. 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 empty with no evidence of obstruction, foreign material or infiltrative disease. Pyloric outflow tract appears patent.

The visible small intestines are normal in wall thickness and layering. 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 and layering. Contents are consistent with normal formed feces and gas.

### ***Pancreas***

The observed pancreas appears appropriately isoechoic to surrounding omental fat. Visible capsule is smooth and normal in contour. Visible pancreatic parenchyma is homogenous and unremarkable. There is no visible pancreatic duct dilation. There is no evidence of active peripancreatic inflammation.

### ***Free Abdomen***

There is no evidence of peritoneal effusion. There is no apparent lymphadenopathy.

## **ULTRASONOGRAPHIC FINDINGS**

### **Findings**

- Chronic Kidney Disease with mild bilateral pyelectasia – This appearance of the kidneys is consistent with chronic kidney disease such as chronic glomerular or interstitial nephritis, chronic pyelonephritis, etc. Differentials for pyelectasia include pyelonephritis, diuresis, congenital malformation or ureteral or lower urinary tract obstruction.
- Heterogenous Liver – These changes are most consistent with benign processes such as nodular hyperplasia, steroid (vacuolar) hepatopathy, extramedullary hematopoiesis or possibly chronic inflammatory disease and less commonly infiltrative round cell or metastatic neoplasia.
- Moderate 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.

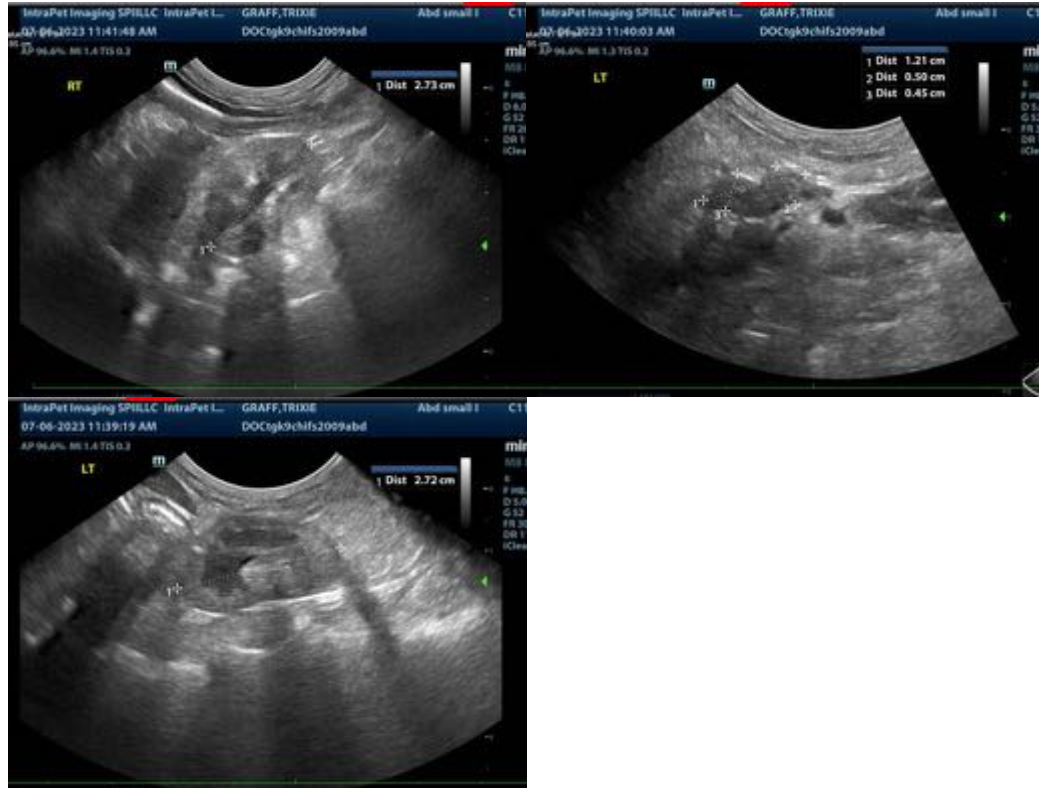
## **INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

There is no ultrasonographically-visible explanation for this patient's chronic intermittent gastrointestinal visible in these images at this time. However, this does not rule out mild or subtle maldigestive or malabsorptive conditions, or even infiltrative bowel disease. Therefore, further evaluation is recommended beginning with a fecal exam (if not recently evaluated), followed by a gastrointestinal malabsorption panel (including cobalamin, folate, TLI and PLI) to Texas A&M GI Laboratory for further evaluation of GI and pancreatic function. Ultimately, pending results, a fecal enteropathogen PCR panel to Texas A&M GI Laboratory could be considered for further evaluation of possible infectious disease.

In the meantime, if tolerated, transition in diet could be considered, beginning with a hydrolyzed protein diet. Some patients respond better to one brand or version of hydrolyzed protein diet over another, so sometimes several trials are necessary.

Additionally, empirical deworming with a 5-day course of Panacur is recommended, as well as continued use of Visbiome.





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.

**Beth Johnson, DVM DACVIM**  
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