

**DATE PRESENTING CLINICAL SIGNS**

8/23/22 Vomiting/anorexia, initially dx pancreatitis 7/27/22. Azotemia diagnosed 7/29/22 - tx with IVF and aggressive supp care until azotemia plateau. UA showed pyuria but UC negative. Appetite improved, now seems back to normal

**PATIENT**

Roxie Jaskiewicz

Current Medications: Completed 2 wk course Clavamox 8/12  
 Recommended switch from Purina OM to renal diet  
 Lab Results: 8/6/22: BUN 106, creat 2.0, SDMA 79 (CBC WNL)  
 Date of Previous IntraPet Ultrasound: No previous.  
 Sedation: Not required to complete full diagnostic ultrasound.  
 Stat Report: Not requested.

**SPECIES**

Canine

**BREED**

Yorkie

**SEX**

Spayed Female

**AGE**

5/18/13

**WEIGHT**

4 lb 4.5 oz

**INTERPRETED BY**Beth Johnson, DVM  
DACVIM**IMAGING PERFORMED BY**

Rachel Brilhart RDMS

**HOSPITAL NAME**

Chadwell AH

**REFERRING VET**

Dr. Jones

**INVOICE**

40675

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

The urinary bladder is moderately 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, irregular and diffusely echogenic with decreased corticomedullary distinction and poor visualization of internal architecture. No mineral is observed. Bilateral pyelectasia is present. The space around the right kidney is markedly enhanced/hyperechoic in appearance. The left kidney measures 2.69 cm. The right kidney measures 3.2 cm.

**Adrenal Glands**

The right adrenal gland is normal in size (1.1 cm long x 0.53 cm at the cranial pole and 0.55 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 (1.35 cm long x 0.50 cm at the cranial pole and 0.50 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**

The liver is subjectively normal in size with normal smooth curvilinear peripheral contour. Parenchyma is appropriately hypoechoic to the spleen in echogenicity and appropriately mildly coarse and homogenous in echotexture. 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 stomach wall is normal in thickness (canine < 0.5 cm and feline < 0.4 cm) 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. Mild hyperechoic mucosal fogging or speckling is noted. Small intestinal motility appears adequate (1-3 contractions per min). The lumen is empty with no evidence of obstruction or foreign material.

The visible colon is normal in wall thickness (< 0.2 cm) and layering. Contents are consistent with normal formed feces and gas.

### ***Pancreas***

The area of the pancreas contains irregular hyperechoic pancreatic remodeling.

### ***Free Abdomen***

There is no evidence of free peritoneal effusion noted in these images.

There is no apparent lymphadenopathy noted in these images.

## **PRIMARY FINDINGS**

- Chronic Kidney Disease with bilateral pyelectasia and changes consistent with perinephric inflammation, suggestive of an acute on chronic process, possibly brought on by an infection such as is seen with pyelonephritis or Leptospirosis, etc.
- **Mild mucosal speckling** – Mucosal speckling is often present with inflammatory bowel disease (IBD). It is not specific for type or severity of disease. Mild speckling change can occur as a normal patient variant in the post-prandial state.
- **Hyperechoic pancreas** – This finding is suggestive of pancreatic fibrosis, possibly secondary to chronic pancreatitis. A TLI is recommended to rule out exocrine pancreatic insufficiency (EPI), especially if clinical signs (weight loss, diarrhea, etc.) are present.

## **SECONDARY FINDINGS**

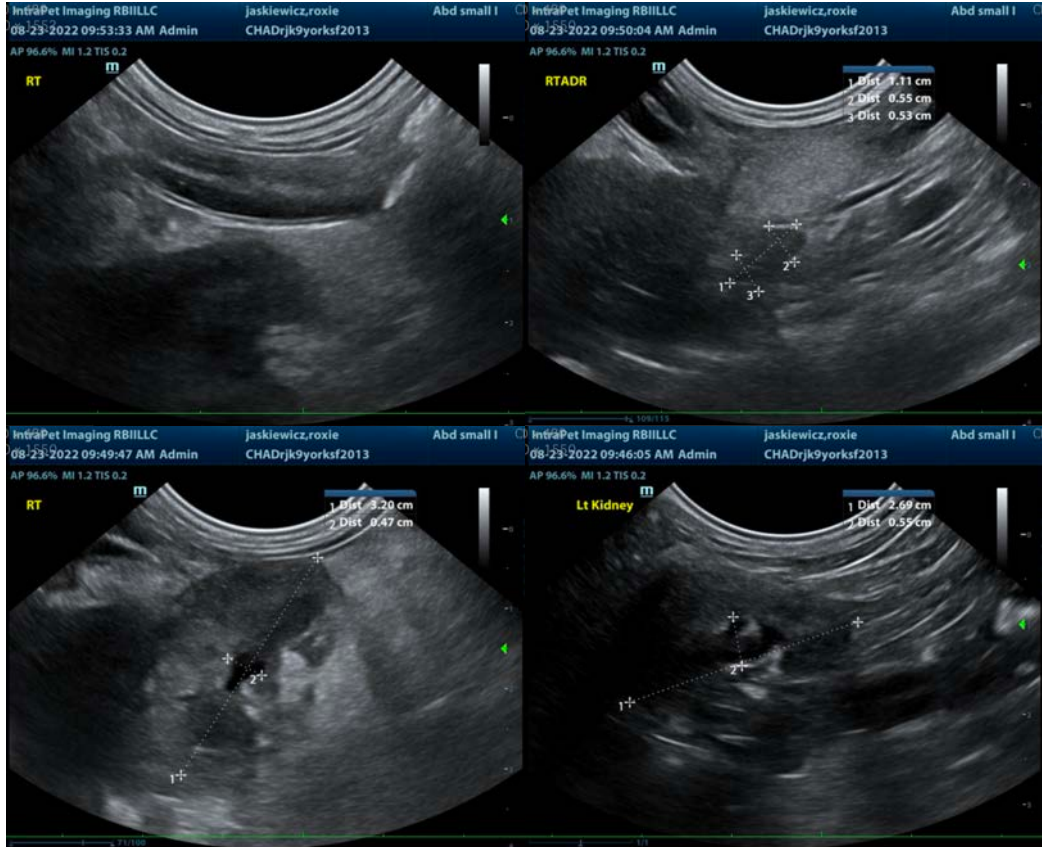
- **Gallbladder debris** - Cholecystic debris is of unknown clinical significance. It can be seen with biliary stasis from fasting or illness. Cholecystic debris is not necessarily related to hepatobiliary disease. Echogenic bile is most commonly an incidental finding in dogs and should be interpreted in combination with clinical signs such as nausea, inappetence, cranial abdominal discomfort and/or laboratory changes such as increased ALP and/or increased Tbili.

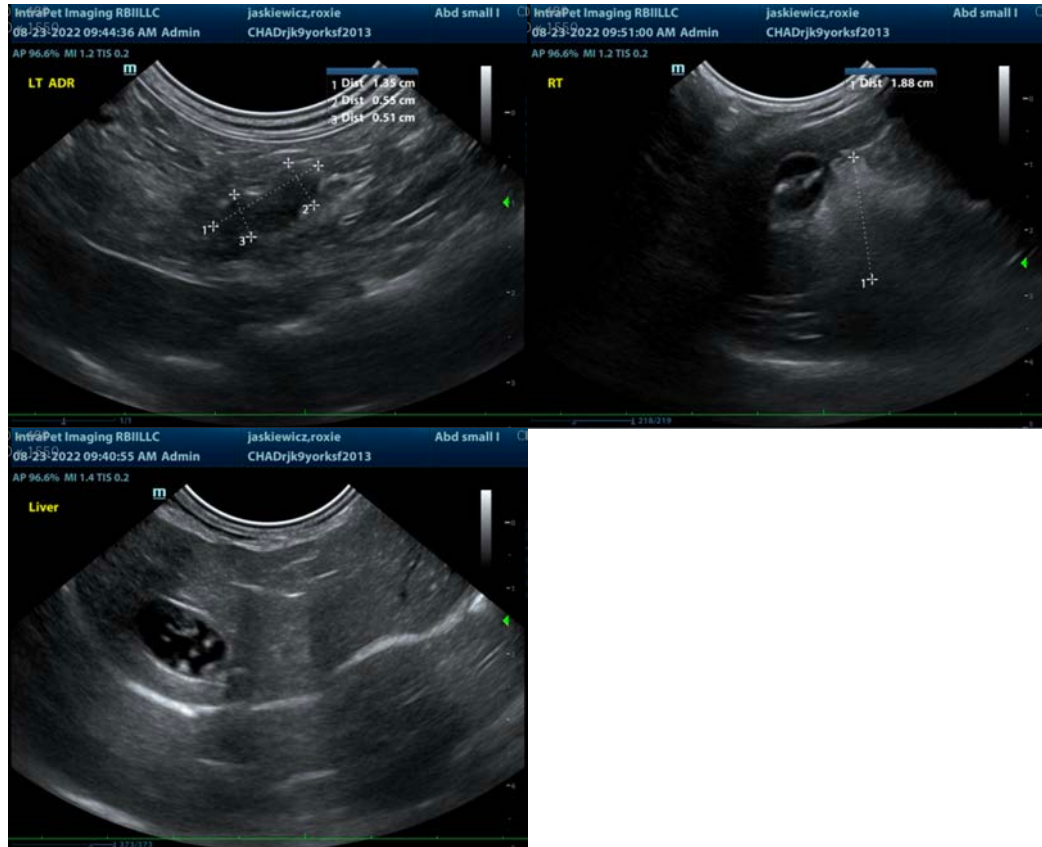
## **INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

Given this patient's mild bowel and pancreatic changes combined with the reported hypoalbuminemia, a gastrointestinal malabsorption panel (including cobalamin, folate, TLI and PLI) to Texas A&M GI Laboratory is recommended for further evaluation of GI and pancreatic function.

Once the urine sediment is clear, if there is protein present, a urine protein to creatinine ratio would be recommended, as would be a blood pressure, if not recently evaluated. Testing for Leptospirosis is indicated, given the inflammatory changes present.

In the meantime, medical management of chronic kidney disease with diet, management of proteinuria and/or hypertension (if present), electrolyte abnormalities (if present), etc., combined with symptomatic therapy such as antiemetics, appetite simulants (if indicated), and possibly subcutaneous fluid therapy may all be warranted.





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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