

**DATE PRESENTING CLINICAL SIGNS**

1/23/23

History: Weight loss. Gurgling sounds on auscultation of lungs/left caudal lung lobe found on exam of 11/3/22. X-rays done and sent to IDEXX- see report.

**PATIENT**

Rosie Eisenstein

Current Medications: Zorbium transdermal applied 11/3/22.

Lab Results: See attached.

Date of Previous IntraPet Ultrasound: No previous.

**SPECIES**

Sedation: Not required to complete full diagnostic ultrasound.

Feline

Stat Report: Not requested.

Imaging Performed By: Rachel Brillhart, RDMS.

**BREED**

DSH

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN****SEX**

Spayed Female

**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.

**AGE**

6/8/2009

Kidneys are overall normal in size and shape with smooth peripheral margination. A normal 1:3 cortex to medulla ratio is maintained. The medulla and cortices are uniform in texture with some mild increased cortical echogenicity and mild loss of corticomedullary distinction, expected in this age patient. There is no evidence of mineral or infarcts observed. The left kidney measures 2.78 cm. The right kidney measures 3.51 cm. Pyelectasia is noted in the right kidney, measuring 0.42 cm in the sagittal view.

**WEIGHT**

6.9 Pounds

**Adrenal Glands**

Left adrenal gland is normal in size (0.5 cm), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

**INTERPRETED BY**

Beth Johnson, DVM  
DACVIM

Right adrenal gland is normal in size (0.39 cm), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

**HOSPITAL NAME**

Cat Hospital of  
Towson

**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.

**REFERRING VET**

Dr. Slaughter

**Liver**

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. Multifocal nodules/masses of mixed echogenicity, primarily hyperechoic in echogenicity but containing multiple cysts and cystic areas of varying size, the largest of which measures 2.0 cm x 3.0 cm and is present in the left liver. Others are smaller 1-2 cm in diameter throughout the right liver. Visible vasculature and biliary tree appear normal without distension or congestion.

**INVOICE**

20769

Gallbladder is non-distended in size. The wall is smooth without visible thickening. Luminal contents are primarily anechoic. There is no evidence of cystic or common bile duct dilation.

**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 intestine demonstrates areas of mildly thick muscularis layer relative to mucosa (disruption of the normal 1:3 muscularis:mucosa ratio). Small intestinal submucosa is slightly irregular, thick and hyperechoic, without evident loss of layering appreciated. The lumen of the small intestine is empty with no evidence of obstruction or foreign material.

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.

### ***Other***

Subtle ringdowns are present at the level of the diaphragm but there is no evident pleural pathology, pleural effusion, pericardial effusion noted in the images provided of the thorax.

## **ULTRASONOGRAPHIC FINDINGS**

### **Primary Findings**

- Feline biliary cystadenoma – In a senior cat, this liver lesion is most consistent with a/multiple benign biliary cystadenomas. Malignancy cannot be ruled out but is considered less likely given lack of clinical signs and/or laboratory changes.
- Inflammatory bowel disease (IBD) pattern – Thick muscularis has been reported with infiltrative bowel disease including both benign inflammatory disease as well as infiltrative neoplasia such as lymphoma. No aggressive lymphadenopathy, loss of layering, etc. is noted to make lymphoma more probable, but lymphoma cannot be definitively ruled out without tissue sampling.
- Subtle ringdowns are suggestive of concurrent pulmonary pathology, however, there is no evidence of a thoracic mass or pleural lesion noted in these images at this time.

### **Secondary Findings**

- Age-related kidney changes with mild to moderate right kidney pyelectasia. Differentials for pyelectasia include pyelonephritis, diuresis, congenital malformation or ureteral or lower urinary tract obstruction.

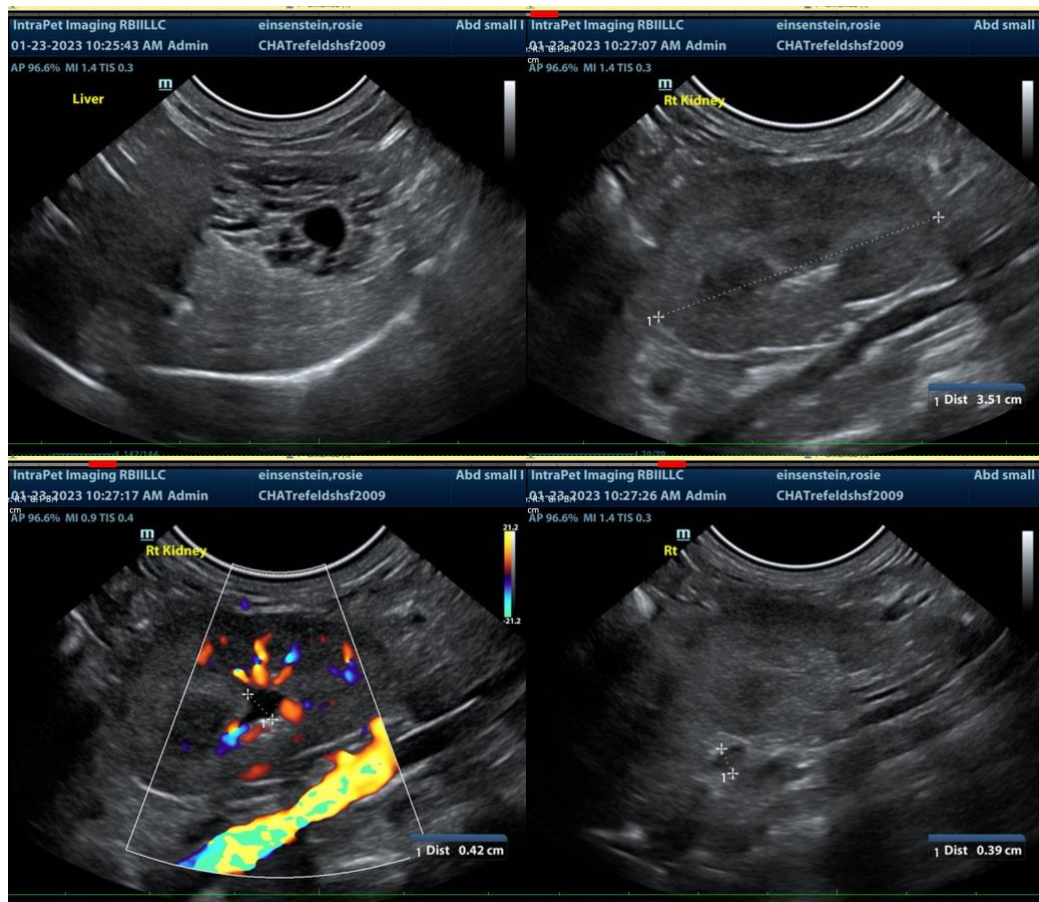
## **INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

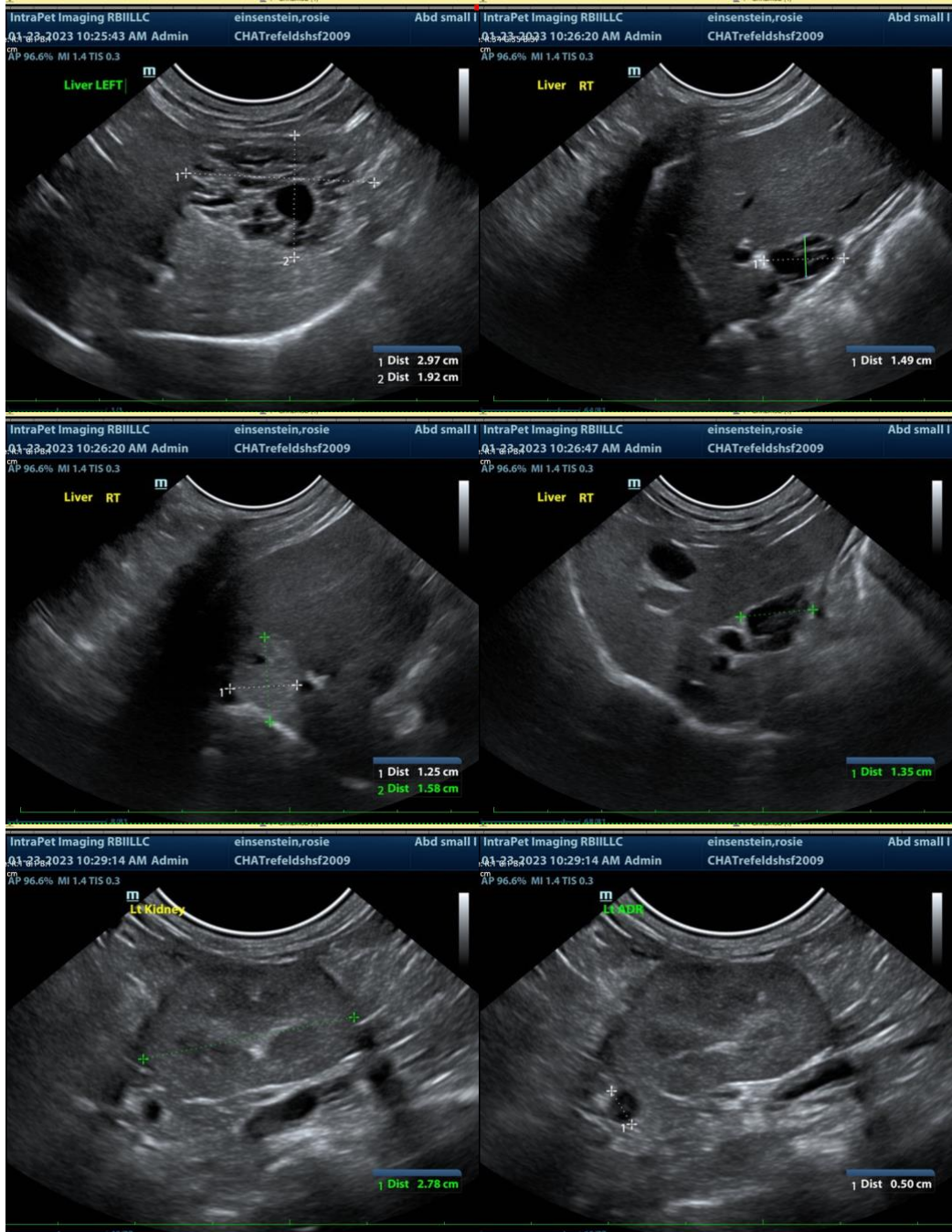
If this patient is experiencing respiratory signs, or has suspicion of pulmonary disease based on clinical signs, given the reported radiology review, additional imaging of the thorax could be considered with a thoracic CT.

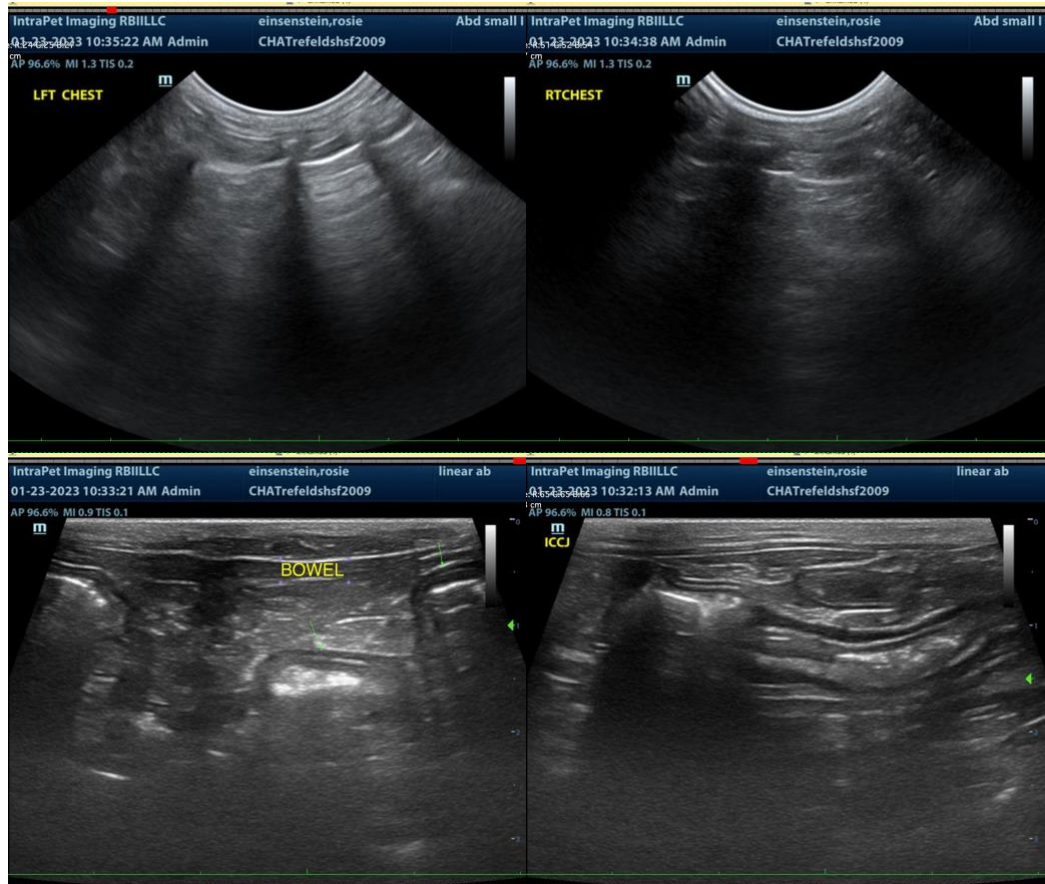
Given this patient's weight loss, further recommendations depend partially on patient appetite. If appetite is decreased, it could be that the appetite is decreased secondary to chronic kidney disease and addressing

subclinical nausea, mild gastritis, etc., may help in the form of antiemetics, gastroprotectants, +/- and appetite stimulant. If, however, patient appetite is normal or even increased, then the mild bowel changes in these images may suggest and infiltrative bowel disease resulting in malabsorption and further recommendations would include 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.

Ideally, biopsies of the GI tract, being sure to include ileum, if possible, are recommended to definitively diagnose and therefore manage the infiltrative bowel disease.







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.

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