



**DATE PRESENTING CLINICAL SIGNS**

12/22/22

Painful abdomen - history of pancreatitis. Grade 4 murmur, elevated BUN, Creat, Phos.  
Current Medications: cerenia, enrofloxacin, gabapentin, phos-bind. IV fluids (limited in rate due to valvular insuff)

**PATIENT**

Lily Guzick

Lab Results: elevated BUN, Creat, Phos.  
Date of Previous IntraPet Ultrasound: No previous.  
Sedation: Not required to complete full diagnostic ultrasound.  
Stat Report: STAT requested.  
Imaging Performed By: Rachel Brillhart, RDMS.

**SPECIES**

Canine

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**BREED**

Yorkie Mix

**Urinary System**

The **urinary bladder**, trigone, and pelvic urethra presented normal thicknesses and normal tone. The ureters were not visible which is normal. No uroliths or sediment were visualized and anechoic urine was present. No evidence of inflammatory or neoplastic changes was noted. Ureteral papillae were normal.

**SEX**

Spayed Female

The **kidneys** revealed mildly increased cortical echogenicity and thickness with slight pyelectasia. This is a non-specific presentation. Blood flow to the kidneys appeared to be normal. The left kidney measured 3.84 cm and the right kidney measured 4.13 cm.

**AGE**

**Adrenal Glands**

Both **adrenal glands** were visualized and recognized as having normal shape, size, position and echogenicity for this breed. The phrenic vasculature, glandular echogenicity and detail were unremarkable. Capsule, cortex, and medullary definition were normal for this age patient. The left adrenal gland measured 1.73 x 0.5 cm at the caudal pole and 0.48 cm at the cranial pole. The right adrenal gland measured 1.68 x 0.51 cm at the caudal pole and 0.5 cm at the cranial pole.

**WEIGHT**

11.6 lbs

**INTERPRETED BY**

Eric Lindquist, DMV  
DABVP, Cert. IVUSS

**Spleen**

The **spleen** presented a smooth homogeneous parenchyma hyperechoic to liver and renal cortical parenchyma. The capsule was smooth without noticeable expansion or deviation from within the spleen or adjacent pathology. The splenic vasculature demonstrated normal volume without signs of congestion or thrombosis. No sonographic evidence of acute or chronic inflammatory, neoplastic, or infarctual changes was noted.

**HOSPITAL NAME**

Eastern AH

**REFERRING VET**

Dr. Kaufman

**Liver**

The **liver** was uniform with slightly increased portal markings. The hepatic veins were dilated. Significant passive congestion pattern was noted in the liver with secondary ascites. The gallbladder wall was edematous and measured 0.24 cm with a minor amount of debris. There was no significant over distension.

**INVOICE**

42283

**Gastrointestinal**

Examination of the **gastrointestinal tract** revealed a stomach and intestine free of stasis, of normal wall thickness, acceptable curvilinear mural detail, and peristaltic activity. Small and large intestine demonstrated normal luminal chyme and stool consistency respectively. No obstructive or overt infiltrative disease was noted. No associated abnormal lymphatic activity was noted.

### **Pancreas**

The **pancreas** revealed mixed hypoechoic parenchymal changes primarily in the right limb with enhanced mesentery. The region measured 1.7 x 2.0 cm.

### **Free Abdomen**

A minor amount of free fluid was noted in the abdomen.

### **Heart**

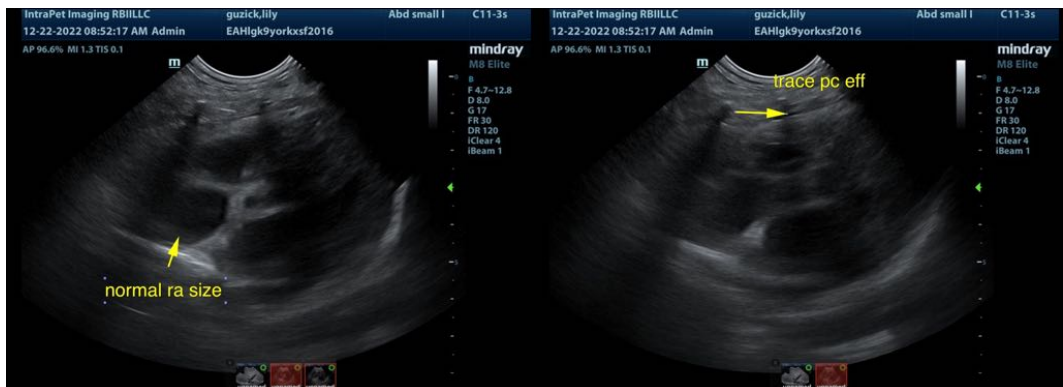
Rapid view of the heart revealed no significant volume overload. The right atrial size appears normal and the left atrial size is at the upper limits of normal. Trace pericardial effusion was noted, yet not a functional issue and barely visible. Full echocardiogram is necessary for further definition.

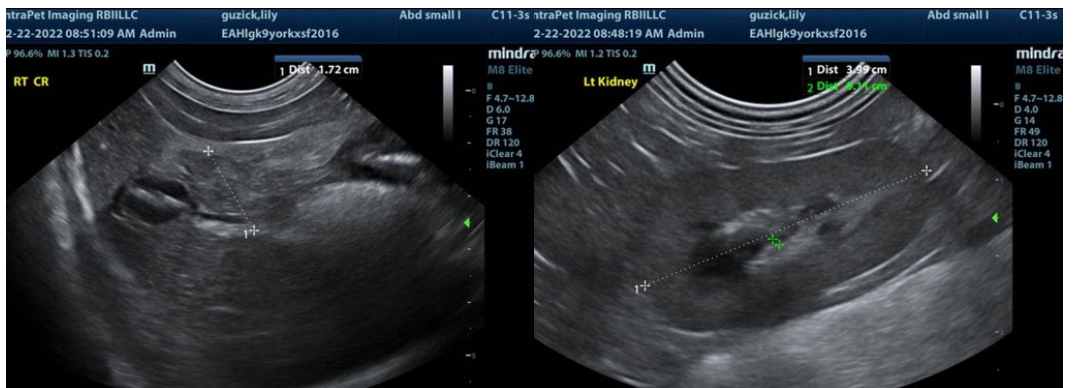
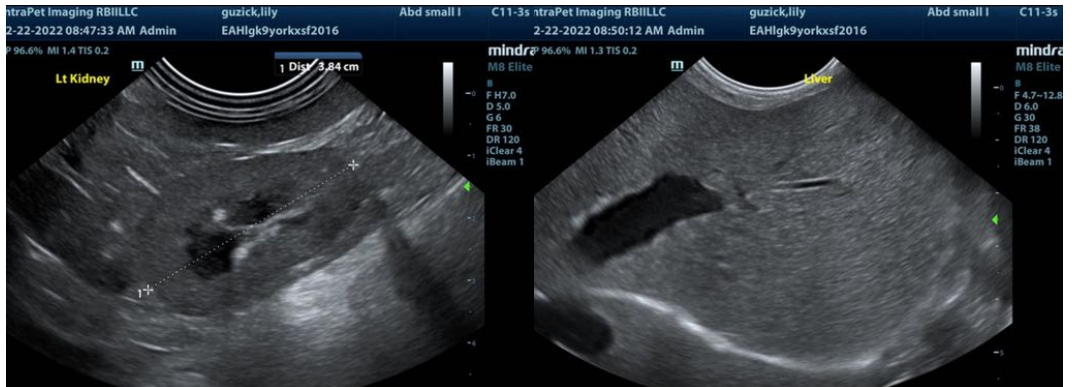
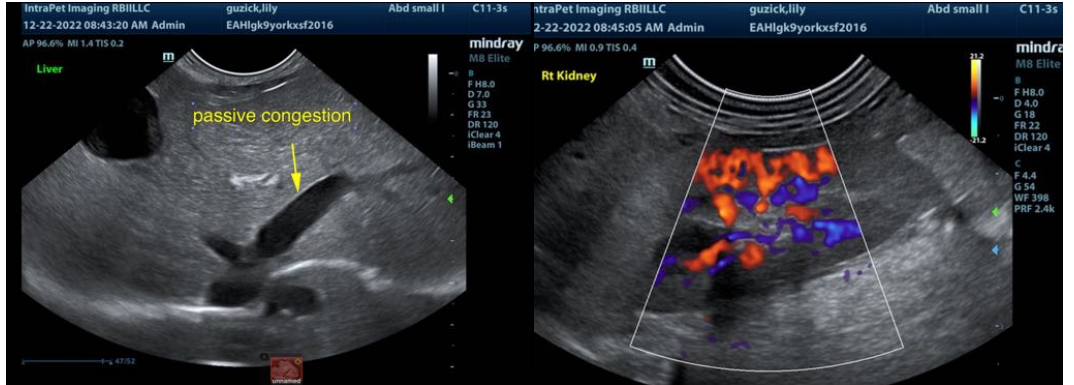
### **ULTRASONOGRAPHIC FINDINGS**

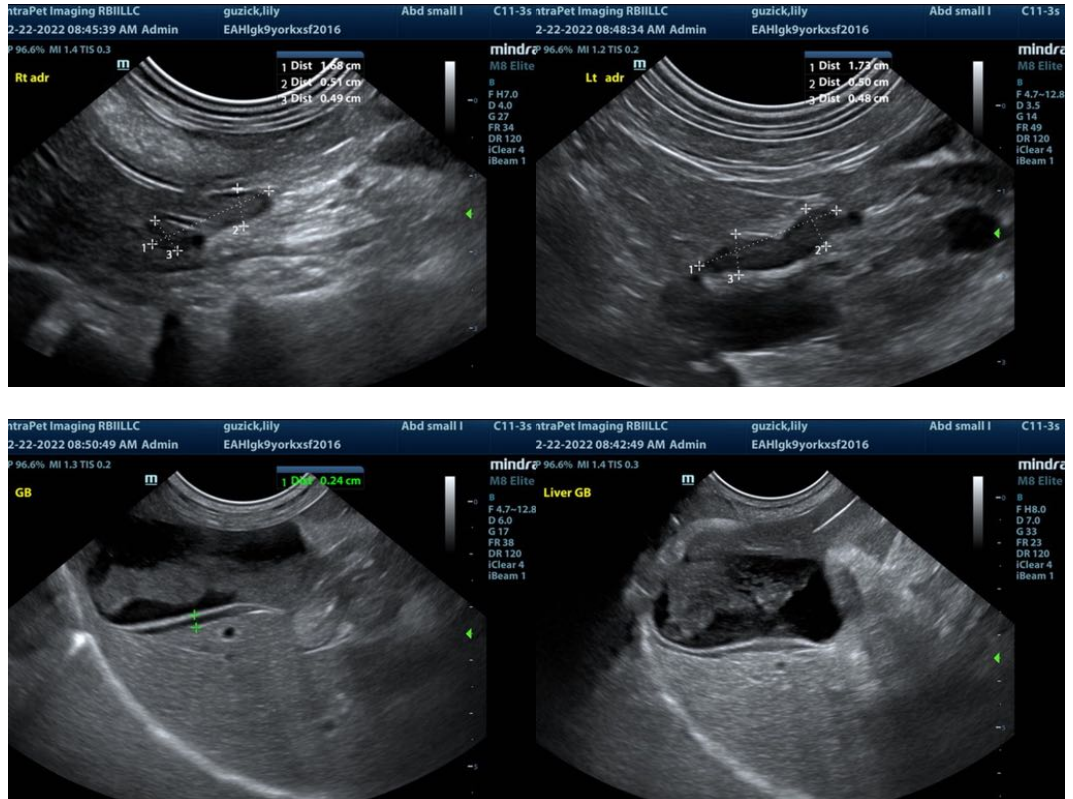
- Passive congestion liver with secondary gallbladder edema.
- Heterogenous pancreas. Mild pancreatitis pattern.
- Mild degenerative renal changes, non-specific. Acute renal insult is suspected.

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

Assessment for fluid rate is indicated as over circulation may be an issue. Leptospirosis, toxin exposure or similar should be considered. Full urinary work-up and blood pressure measurements are indicated. Full echocardiogram with tricuspid insufficiency velocities is indicated to assess for pulmonary hypertension. Chest radiographs are warranted to assess for caudal thoracic disease that may be causing the passive congestion. Recheck sonogram is recommended in 48 hours regarding the liver and pancreas in this patient along with reevaluation of the azotemia.







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.

**Eric Lindquist**, DMV, DABVP, Cert. IVUSS, CEO of SonoPath.com  
Eric.Lindquist@SonoPath.com