

**DATE PRESENTING CLINICAL SIGNS**

8/2/22

**PATIENT**

History: Patient has not been eating for the past 2 weeks. Physical exam is unremarkable with no fever. No vomiting and no diarrhea. Routine bloodwork shows elevated ALT and SAP. Rads show bicavitary effusion. Patient is lyme positive.

Tulip Boyce

**SPECIES**

Current Medications: Doxycycline 50 mg po daily, Denamarin advanced

Lab Results: Lyme Positive, elevated ALT/SAP.

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

Canine

Stat Report: Not requested.

**BREED**

Imaging Performed By: Rachel Brillhart, RDMS.

Jack Russell

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

Spayed Female

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 were noted. Ureteral papillae were normal.

**AGE**

6/1/16

The **kidneys** revealed normal size and structure, corticomedullary definition and ratio for this age. The cortices presented largely uniform texture with normal echogenic relationship to liver and spleen. Medullary structure differed distinctly from the cortex and no evidence of pelvic dilation was present. The capsules were acceptably uniform without significant irregularities. The left kidney measured 4.3 cm. The right kidney measured 4.3 cm.

**WEIGHT**

12.5 Pounds

**Adrenal Glands****INTERPRETED BY**

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 right adrenal gland measured 2.15 cm x 0.49 cm at the caudal pole and 0.5 cm at the cranial pole. The left adrenal gland measured 1.89 cm x 0.59 cm at the caudal pole and 0.58 cm at the cranial pole.

Eric Lindquist, DMV  
DABVP, Cert. IVUSS**HOSPITAL NAME****Spleen**

Madonna VC

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 were noted.

**REFERRING VET**

Dr. Brackett

**Liver**

The **liver** revealed slight increased portal markings, yet the changes were minor. The gallbladder and common bile duct were unremarkable.

**INVOICE**

16690

**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**

Diffuse hyperechoic changes were present in the area of the **pancreas**. The pancreatic remodeling was evident with multifocal to diffuse hyperechoic changes. These changes are consistent with fibrosis, amyloid, saponification of fat and may contain areas of low-grade chronic active inflammation especially if pain on imaging (+ Murphy sign) was present +/- focal subxyphoid palpation reveals pain response. No overt masses were noted. This is a moderate change.

### **Free Abdomen**

Trace amounts of **free fluid** were noted in the abdomen. Trace amounts of free fluid were noted around the left kidney as well.

### **Other**

The transdiaphragmatic view revealed **pleural effusion**.

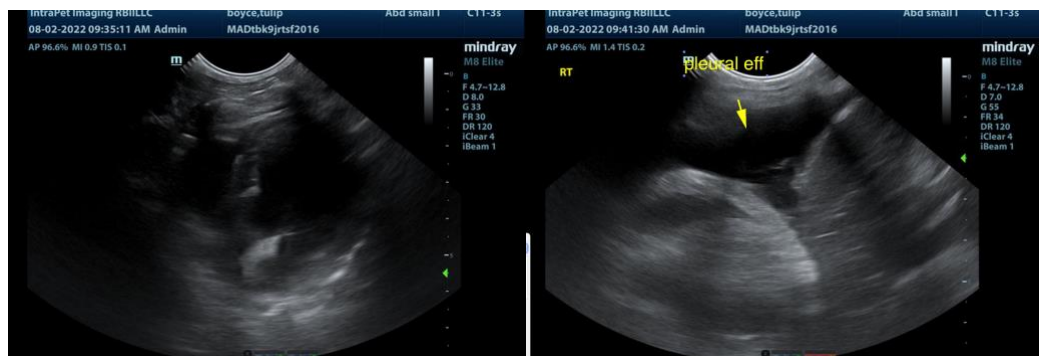
A rapid view of the **heart** revealed no evident pathology. Normal internal volumes and contractility were noted in the heart.

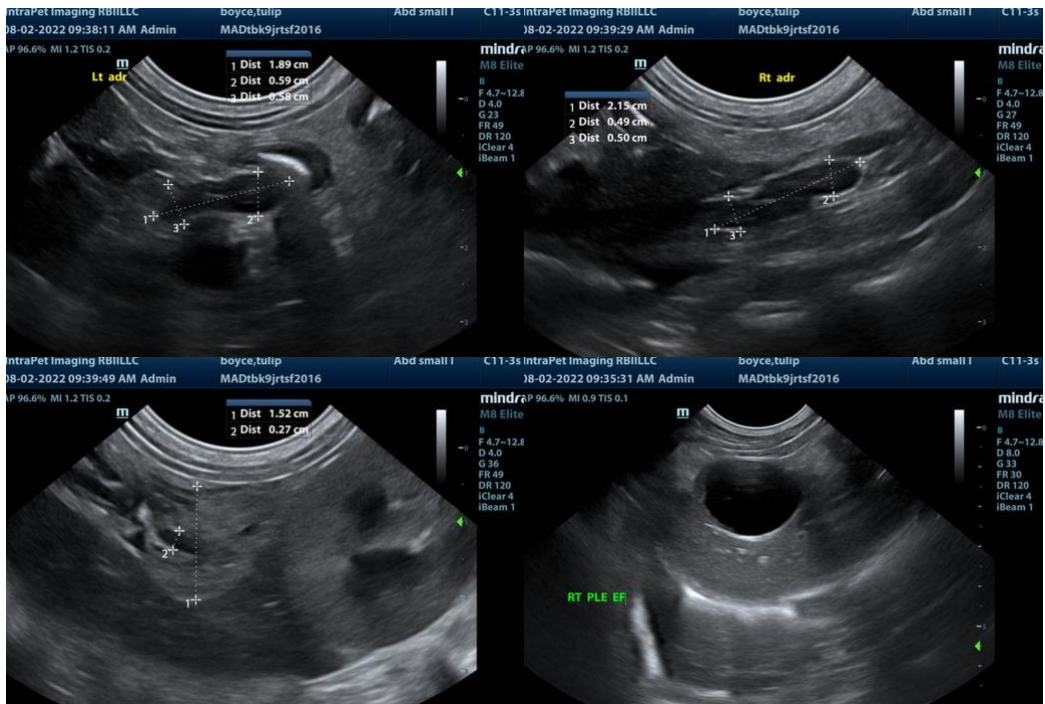
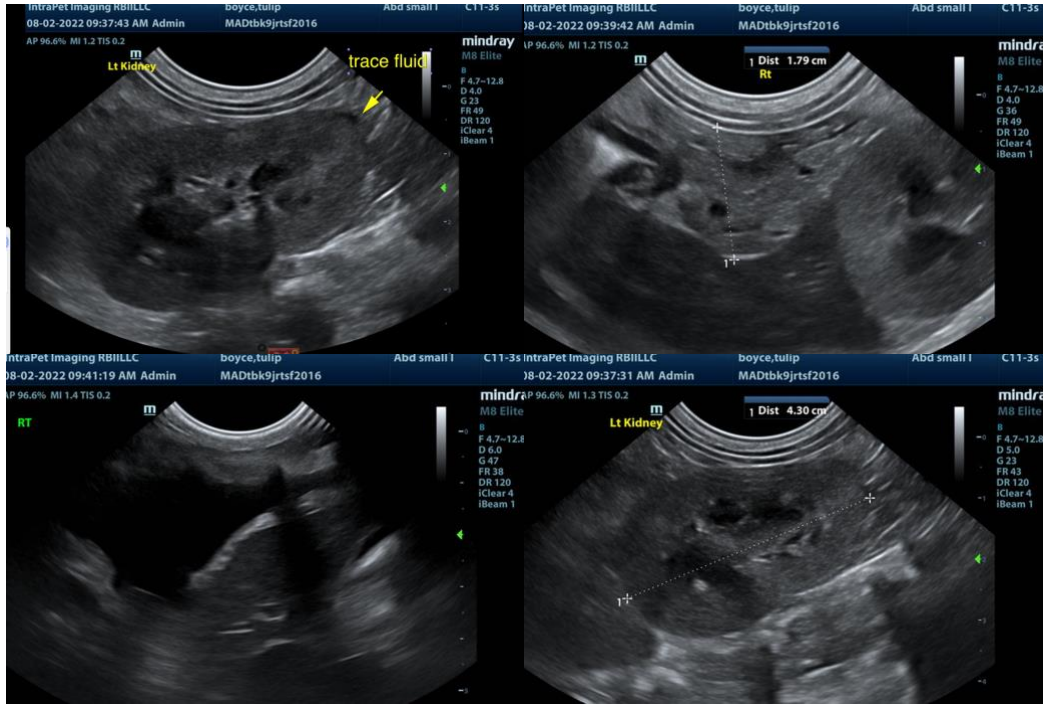
## **ULTRASONOGRAPHIC FINDINGS**

- Noncardiogenic pleural effusion
- A minor amount of abdominal fluid without significant structural changes
- Pancreatic remodeling
- Acute inflammatory hepatopathy

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

Pleurocentesis +/- chest CT would be ideal in this patient. The cause of the free fluid in the abdomen is unclear, its only trace. However, a systemic inflammatory event is likely. No overt evidence of neoplasia yet an occult neoplastic event could not be completely ruled out. I'm assuming that albumin levels are normal and oncotic pressure is not an issue.





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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