



## PATIENT PRESENTING CLINICAL SIGNS

Bella Minervini Abnormal PE/Chem/CBC/UA Results ^ ALT

## SPECIES

Canine

## BREED

Boston Terrier

## SEX

Spayed Female

## AGE

13 years

## WEIGHT

20 lbs

## INTERPRETED BY

Andrea Nicastro,  
DVM, Diplomate  
ACVIM (*Small Animal  
Internal Medicine*)

## IMAGING PERFORMED BY

Hope Brossman

## HOSPITAL NAME

Animal Mansion VH

## REFERRING VET

Jon Bertoldo DVM

## INVOICE

11907

## DATE

10.27.22

## ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

### Urinary System

The urinary bladder and visible portion of the pelvic urethra are normal for the degree of luminal distension. The urine is anechoic with no evidence of debris. Cystic calculi and discrete masses are not observed. The region of the trigone and the visible portion of the proximal urethra are normal.

The **left kidney** is normal size (5.01 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal loss of corticomedullary distinction. Several cortical cysts are present. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The **right kidney** is normal size (5.07 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal loss of corticomedullary distinction. Several cortical cysts are present. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

### Adrenal Glands

The **left adrenal gland** is mildly enlarged (0.77 cm at cranial pole) (0.72 cm at caudal pole); normal shape and smooth peripheral contours. A 0.27 cm, irregular, hyperechoic nodule/area is observed in the caudal pole. Glandular echogenicity and detail at the cranial pole appear relatively. The phrenicoabdominal vein and surrounding vasculature are normal.

The **right adrenal gland** is normal size (0.96 cm at cranial pole) (0.58 cm at caudal pole); normal shape; homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

### Spleen

The **spleen** is normal in size (1.15 cm in width at the level of the hilus) with a normal capsular contour. There is appropriate echogenicity and echotexture. No focal lesions are observed. Splenic vasculature is normal.

### Liver

The **liver** is subjectively prominent in size with normal curvilinear peripheral contours. The parenchyma is hyperechoic relative to the spleen and diffusely homogeneous in appearance. No distinct focal lesions are observed. Vascular and biliary tracts are of normal volume with no evidence of congestion.

The **gall bladder** lumen is moderately distended. The wall is thin and smooth. Luminal contents are anechoic. The cystic and common bile ducts are normal/not seen.

### Gastrointestinal

The **gastric lumen** is mildly distended with ingesta. The gastric wall is normal in thickness with a normal layering pattern. The small intestinal lumen is not dilated. The small intestinal wall thickness is normal with a normal layering pattern and appropriate mural detail. Discreet masses are not identified. The colonic wall is normal. There is no evidence of an obstructive pattern.

### Pancreas

The region of the **pancreas** is isoechoic relative to surrounding omental fat. No obvious parenchymal abnormalities are observed. There is no evidence of regional inflammation or effusion.

### **Free Abdomen**

There is no evidence of free fluid. The abdominal **lymph nodes** are normal/not visible.

### **Other**

A brief visualization of the heart reveals no evidence of pericardial effusion.

## **ULTRASONOGRAPHIC FINDINGS**

### **Primary Findings**

- Given the elevated ALT and the sonographic hepatic changes, a diffuse hepatopathy (i.e., inflammatory disease, Leptospirosis, hepatotoxicosis (i.e., copper), other hepatopathy), +/- concurrent age-related change (i.e., remodeling, vacuolar hepatopathy) is suspected.

### **Secondary Findings**

- Bilateral renal cortical cysts
- Mild left adrenomegaly

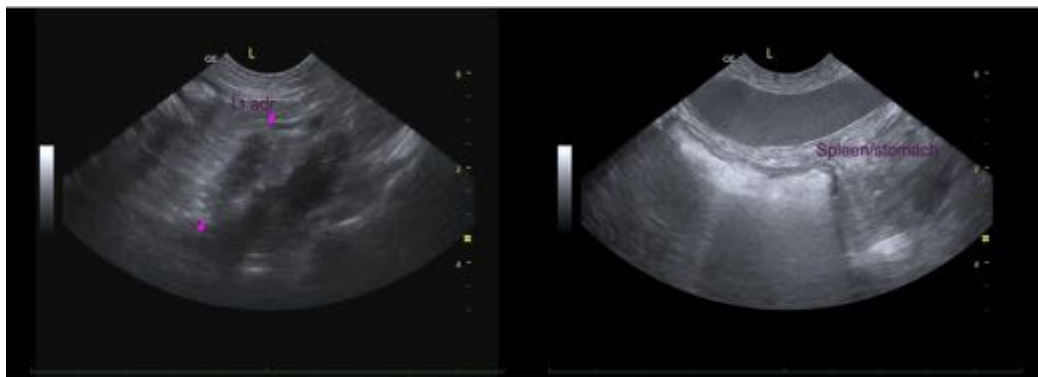
## **INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

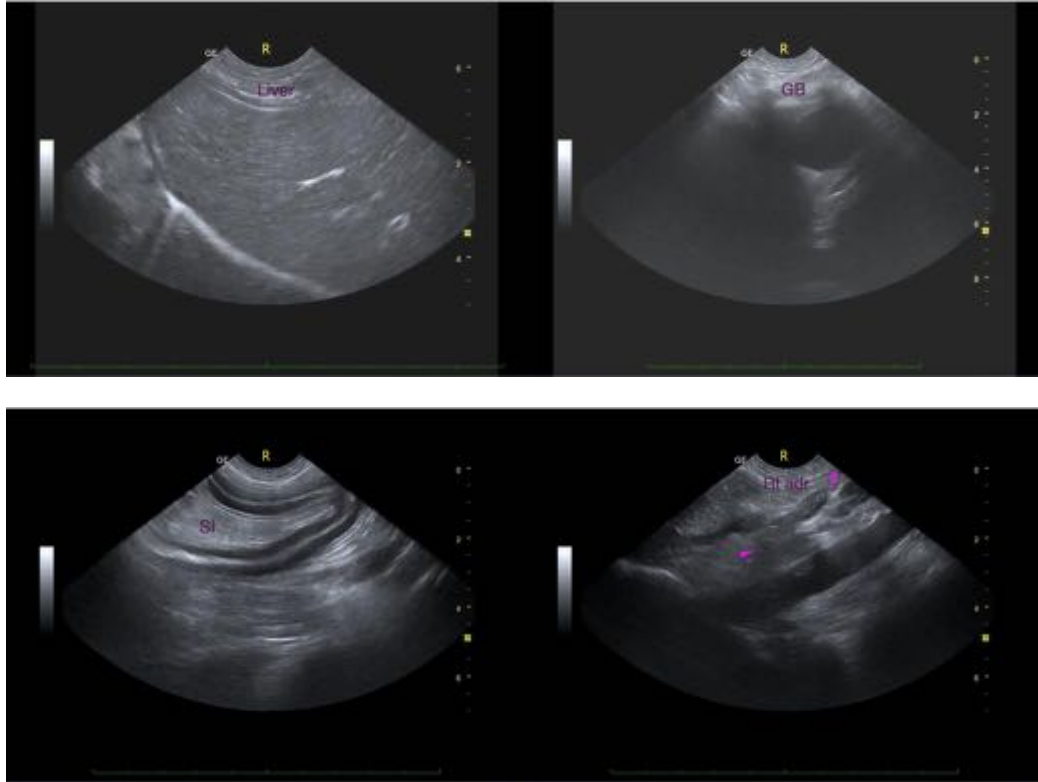
Given the elevated ALT, pre-and postprandial serum bile acids +/- fine hepatic tissue sampling (i.e., fine-needle aspirate or surgical biopsy) should be considered. If surgical biopsies are pursued, aerobic and anaerobic bile cultures should be considered to be obtained and copper quantitation performed.

Also consider Leptospirosis testing (i.e., blood and urine PCR, serology).

Given the PU/PD, a urine culture and sensitivity cannot be completely excluded to assess for occult pyelonephritis.

Given the patient's age, thoracic radiographs should also be considered to assess cardiopulmonary status, particularly if the patient is to undergo anesthesia.





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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