

**DATE**

10/11/2021

**PRESENTING CLINICAL SIGNS**

History: hyporexia, lethargy, 1 mo hx of elevated liver enzymes and hypercalcemia.

**PATIENT**

Wembley Wogman

Current Medications: IVF- 35 mLs/hr, Unasyn 22 mg/kg q 8 hrs, Pantoprazole 1 mg/kg q 24 hrs, Cerenia 1 mg/kg q 24 hrs, Enrofloxacin 5 mg/kg q 24 hrs, If eating- can transition to oral meds (Amoxicillin instead of Unasyn and Cerenia) and add OM Doxycycline 50 mg PO BID.

Lab Results: SNAP Lepto positive- PCR blood &amp; urine pending for lepto

ALP &gt; 2000, ALT 792, GGT 34, Tbili 10.2. UA 1.013, bilirubin, non-hyaline casts seen, bacteria and WBC's seen.

PCR Lepto test pending (blood and urine).

**SPECIES**

Canine

Radiographs: rounded and abnormal margins of liver on abdominal rads.

Date of Previous IntraPet Ultrasound: No previous IntraPet scans.

Sedation: not needed

Stat Report: not requested

**BREED**West Highland White  
Terrier**SEX**

Male, neutered

**AGE**

6/10/2007

**WEIGHT**

17.1 lbs.

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

The urinary bladder is moderately distended. The wall is normal in thickness with a smooth mucosal surface. 1-2 small cystic calculi are suspected near the urinary bladder neck. The remaining luminal contents are anechoic. The visible portion of the proximal urethra is normal.

The prostate is normal in size (1.20 cm in width) and shape. Parenchyma is homogenous. The prostatic urethra appears normal without evidence of dilation or obstruction.

The left kidney is normal in size (5.01 cm in length) with a normal shape, smooth peripheral margins and normal internal architecture. There is mild loss of corticomedullary distinction. Several hyperechoic shadowing diverticular foci are observed. At least one cortical cyst is visualized. There is no evidence of pyelectasia, infarcts or hydronephrosis. Renal vasculature is normal.

The right kidney is normal size (4.46 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal to mild loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydronephrosis. Renal vasculature is normal.

**Adrenal Glands**

The left adrenal gland is normal size (0.67 cm at cranial pole) (0.53 cm at caudal pole) (2.11 cm in length); 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.

A 4.15 x 4.07 cm round heterogeneous mass effect is infiltrating the cranial to mid portion of the right adrenal gland. The caudal portion is also moderately enlarged (0.92 cm in width). Surrounding mesentery is hyperechoic. There is no obvious evidence of vascular invasion.

**Spleen**

The spleen is subjectively normal in size (1.14 cm in width at the level of the hilus) with an undulating medial contour. The parenchyma is mottled in appearance. A 0.7 cm heterogeneous nodule is observed near the hilus. The lesion causes slight capsular expansion. Splenic vasculature is normal.

**INVOICE**

12336

**Liver**

The liver is subjectively prominent in size with slightly irregular peripheral contours. The parenchyma is hypoechoic relative to the spleen and diffusely mottled in appearance. 2-3 coalescing hyperechoic to heterogeneous nodules/masses are observed in the left side, the largest measuring 2.5 cm in length. Vascular and biliary tracts are of normal volume with no evidence of congestion. The gall bladder lumen is distended. The wall is normal in thickness. A large amount of aggregated echogenic suspended sludge is observed within the lumen. The cystic and common bile ducts are normal/not seen.

**INTERPRETED BY**Andrea Nicastro, DVM,  
Diplomate ACVIM  
(Small Animal Internal  
Medicine)**HOSPITAL NAME**

Eastern AH

**REFERRING VET**

Dr. Haviland

### ***Gastrointestinal***

The gastric wall is diffusely and severely thickened (up to 1.55 cm) with a complete loss of the normal layering pattern. The gastric lumen is not dilated. The pyloric outflow tract is patent. The small intestinal lumen is segmentally fluid distended (mild). The small intestinal wall is mildly to moderately thickened (up to 0.53 cm) with a normal layering pattern and appropriate mural detail. There is disruption in the normal 1:3 muscularis: mucosal ratio and thickening of the submucosal layer in some segments. The colonic wall is normal. No obstructive disease is noted.

### ***Pancreas***

The right limb of the pancreas is prominent in size with irregular peripheral contours. The parenchyma is isoechoic relative to surrounding omental fat and mottled in appearance. No distinct focal lesions are observed. The mesentery effacing the serosal surface is hyperechoic.

### ***Free Abdomen***

The mesentery throughout the abdomen is hyperechoic. Trace free fluid is observed. The abdominal lymph nodes are normal/not visible.

### ***Other***

A brief echocardiogram reveals no evidence of pericardial effusion.

## **ULTRASONOGRAPHIC FINDINGS**

### **Primary Findings:**

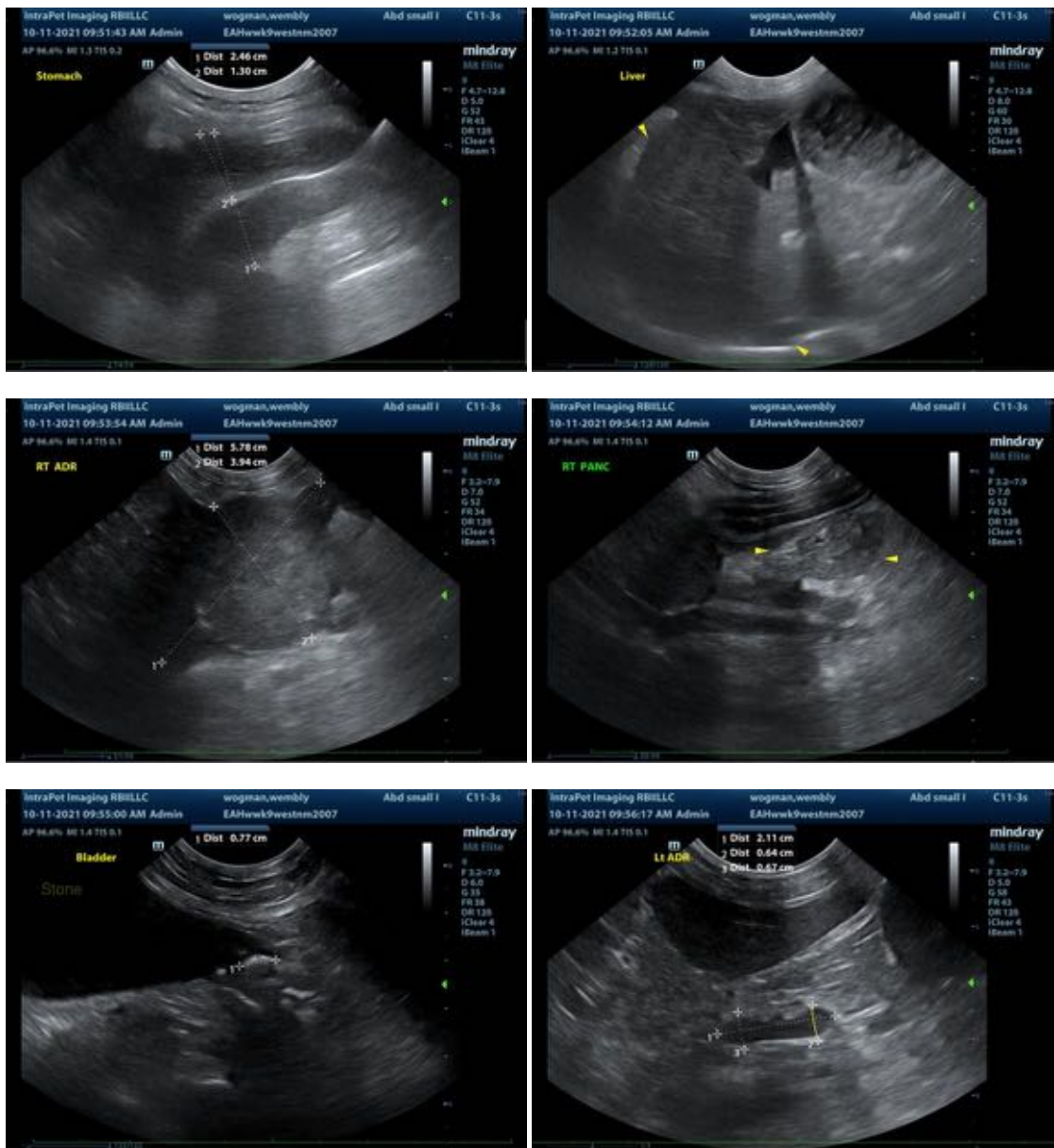
- The gastric wall changes are most consistent with infiltrative neoplasia (i.e., lymphoma, adenocarcinoma) with a low possibility of a severe inflammatory process. The small intestinal wall changes could be consistent with inflammatory disease or emerging neoplasia.
- Right adrenal mass. Neoplasia (i.e., adenocarcinoma, pheochromocytoma, adenoma) is considered likely with a low possibility of benign pathology.
- The liver nodules are concerning for metastatic lesions although benign pathology (i.e., regenerative nodules) cannot be completely excluded. The diffuse hepatic parenchymal changes are non-specific and could be consistent with benign age-related pathology, metastatic or inflammatory disease, other.
- The gallbladder changes are consistent with a developing mucocele.
- Diffuse peritonitis, likely secondary to multi-organ pathology.

### **Secondary Findings:**

- The pancreatic changes are consistent with pancreatitis.
- The splenic nodule could be consistent with a metastatic lesion. Alternatively, benign pathology is possible.
- Bilateral age-related renal changes with left dystrophic mineralization. Suspected small cystic calculi.

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

- Three-view thoracic radiographs are recommended to assess for pulmonary metastases.
- Consider fine needle aspirates of the gastric wall and liver nodules (if clotting status is appropriate). 25-gauge needles should be used. However, given the concern for metastatic disease in the abdomen, the prognosis for this patient is considered guarded and palliative care should be considered.







**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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