

**DATE PRESENTING CLINICAL SIGNS**

12/9/21

**PATIENT**

Lucy Walker

**SPECIES**

Canine

**BREED**

Boxer Mixed Breed

**SEX**

Spayed Female

**AGE**

2/7/11

**WEIGHT**

52.8 Lbs.

**INTERPRETED BY**Eric Lindquist, DMV  
DABVP, Cert. IVUSS**IMAGING PERFORMED BY**

Andi Parkinson RDMS

**HOSPITAL NAME**Animal Emergency  
Hospital**REFERRING VET**

Dr. King

**INVOICE**

12885

History: Presenting Complaint: Not Eating; Vomiting; Diarrhea. Date: 12-07-2021 Notes: Will eat things, did chew up door, and carpet about 2 weeks ago; also gets on counter to eat food. About 2-3 days, vomiting and diarrhea (no blood). Tries to drink but comes back up. Assessment: She is very dehydrated - Increase In LE -- over 48 hours, increase in t.bili. Treated supportively in hospital for 48 hours, did not eat on own, but tolerated some syringe feeding. Owner elected to try at home on 12/8-- but went home vomited after drinking large bowl of water. Started with bloody/mucoid stool. Has a little more free fluid in abdomen on representation on 12/8 night. Unable to get sample on presentation-- wanted to check for septic effusion, but currently unable. Readmit on 12/8 night, resumed IVF, added metronidazole to currently meds. No fever, albumin was wnl on recheck, lytes wnl.

Current Medications: Ondansetron, Amoxicillin, Cerenia, Gabapentin, Denamarin, Ampicillin, Entyce, Metoclopramide, Pantoprazole, Buprenex, Acepromazine.

Radiographs: very hazy, no obvious fb obstruction, but some gas in SI.

Date of Previous IntraPet Ultrasound: No previous IntraPet scans.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

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

The urinary bladder, trigone, and pelvic urethra are normal in thickness and the mucosal surface is smooth. The bladder lumen is distended with mostly anechoic urine. No masses, inflammatory changes or calculi are observed. Ureteral papillae and visualized portion of the proximal urethra, visible to a depth of 2 cm, are normal.

The left kidney presented normal size (6.89 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 hydroureter.

The right kidney presented normal size (7.59 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 hydroureter.

**Adrenal Glands**

The region of the left adrenal gland is evaluated. No obvious pathology is seen. However, this region is difficult to evaluate due to the reactive mesentery.

The right adrenal gland is mildly enlarged (0.67 cm at cranial pole) (0.93 cm at caudal pole) (3.08 cm in length); with a normal shape and 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 subjectively prominent in size (2.28 cm in width at the level of the hilus) with normal curvilinear peripheral contours. A light micronodular pattern is present throughout the parenchyma.

Myelolipomas are observed in the region of the hilus. Splenic vasculature appears normal with no evidence of thrombosis.

### ***Liver***

The liver is enlarged with irregular peripheral contours. A >9.0 cm irregular heterogeneous slightly cavitated mass is observed at the caudal aspect. The mesentery surrounding the mass is hyperechoic. The remaining hepatic parenchyma is slightly heterogeneous in appearance. Hepatic vasculature and intrahepatic biliary tracts are of normal volume with no evidence of congestion.

The gall bladder lumen is mildly distended. The wall is slightly thickened (up to 0.30 cm) and echogenic in appearance. A small amount of echogenic debris is observed within the lumen, some of which is adhered and some of which is suspended. The cystic and common bile ducts are normal/not seen.

### ***Gastrointestinal***

The gastric lumen is not distended. 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. No obstructive or overt infiltrative disease is noted.

### ***Pancreas***

The pancreas is difficult to discern from the reactive mesentery in the region. However, no obvious abnormalities are seen.

### ***Free Abdomen***

A small to moderate amount of free fluid is present within the abdomen. The mesentery throughout the abdomen is extremely hyperechoic. The abdominal lymph nodes are normal/not visible.

## **ULTRASONOGRAPHIC FINDINGS**

### **Primary Findings**

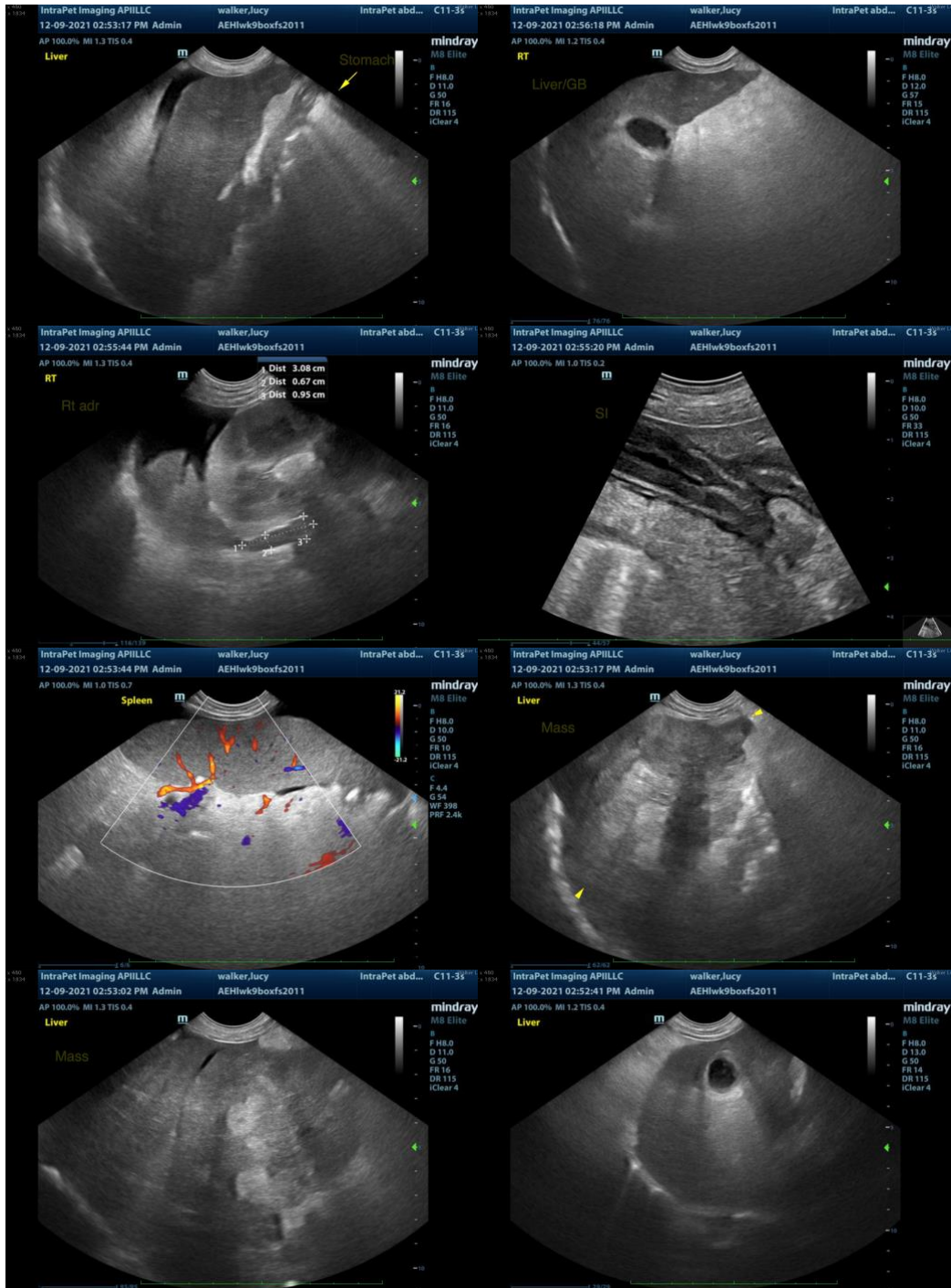
- Hepatic mass. Neoplasia (i.e., adenocarcinoma, adenoma, round cell tumor) is considered likely with a lower possibility of benign pathology (i.e., inflammatory disease, regenerative nodular hyperplasia). Diffuse peritonitis is present, likely secondary to the hepatic mass.
- The gallbladder changes could be consistent with cholecystitis and/or benign age-related hyperplasia.

### **Secondary Findings**

- Bilateral age-related renal changes
- Mild right adrenomegaly
- The splenic parenchyma changes could be consistent with extramedullary hematopoiesis, lymphoid hyperplasia or less likely, infiltrative neoplasia.

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

- Three-view thoracic radiographs are recommended to assess for pulmonary metastases.
- If an aggressive approach is desired, consider referral to a board-certified surgeon to discuss hepatic mass removal or debulking. An abdominal CT scan would be useful in presurgical planning.



**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