

**DATE**

10/15/21

**PRESENTING CLINICAL SIGNS**

Acute onset vomiting and inappetence 10/14. PE - soft but formed stool on rectal exam with small amt frank blood. PE otherwise unremarkable.

**PATIENT**

Tucker Lent

Current Medications: Metro 500mg po bid - started noon 10/14

1 mg/kg injection of Cerenia, Pepcid 10/14 AM

LRS administered at 90mL/kg/day 10/14 and continued 10/15

Lab Results: CBC - leukocytosis (21k). Chem - mildly elevated ALT - 152, resolved with hospitalization and IVF. Recheck ALT 114.

snap lipase normal

**SPECIES**

Canine

Radiographs: two view abd radiographs - no overt FB but concern small intestines appear subjectively thickened, potentially overlapping loop mid ventral abd on lateral that is dilated compared to others

Date of Previous IntraPet Ultrasound: No previous

Sedation: not needed

**BREED**

Golden Retriever

Stat Report: STAT requested

**SEX**

Intact male

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

The urinary bladder is moderately distended with anechoic urine. The Bladder wall, trigone, ureteral papillae and visible urethra (to a depth of 2cm) appear normal with no evidence of wall thickening, mucosal irregularities, masses or cystic calculi.

**AGE**

1/6/21

The prostate is large in size (2.75 cm) but has a regular shape with smooth external margins. The parenchyma is heterogenous but no discrete focal lesions are present. The prostatic urethra appears normal with no evidence of irregularity, invasion, mass effect or calculi.

**WEIGHT**

86 lbs

The left kidney has a normal shape and size (7.51 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

**INTERPRETED BY**

Kathleen Sennello  
DVM, MS, Diplomate  
ACVIM (Small Animal  
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The right kidney has a normal shape and size (7.55 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

**HOSPITAL NAME**

Churchville VC

**Adrenal Glands**

The left adrenal gland is normal in size measuring 0.53 cm at the caudal pole It is observed in its normal position cranial to the left renal artery. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

**REFERRING VET**

Dr. Uhland

The right adrenal gland is normal in size measuring 0.45 cm at the caudal pole It is observed in its normal position between the cranial aspect of the right kidney and the caudal vena cava. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

**INVOICE**

92392

**Spleen**

The spleen is subjectively normal in size, echotexture is homogenous, and the splenic capsule is smooth with no irregularities. The blood flow through the hilus and splenic parenchyma appears normal. No focal parenchymal abnormalities are visualized.

### **Liver**

The liver is subjectively normal in size, and echogenicity with smooth peripheral margins. The parenchyma is heterogenous in echotexture with subtle, indistinct focal mottling. The visible portions of the vasculature and biliary tract appear normal. There is an ill-defined, isoechoic bulging area that measured 2.2 cm. The gallbladder lumen is moderately distended. The wall of the gallbladder is not thickened and has a smooth mucosal surface. Luminal contents are primarily anechoic. The cystic and common bile ducts are normal/not visible.

### **Gastrointestinal**

The stomach contains minimal luminal contents. In some areas it measures as thickened and somewhat irregular at up to 1.3 cm (normal is <0.7cm) with some variability due to the presence of rugal folds. In the more thickened areas the distinction of the gastric wall layering appears diminished. No focal mass lesions are observed.

Some of the visualized areas of duodenum, jejunum and ileum have a uniform diameter with minimal fluid distension. Other areas appear thickened with a measurement of up to 0.65 cm in the jejunum and somewhat hypoechoic with mildly reduced detail of layering, but it is still intact. These areas of bowel have mild fluid distension and appear somewhat corrugated with hyperechoic mesentery surrounding. Visualized peristalsis appears appropriate to increased. There were no focal lesions consistent with obstruction or a mass effect observed.

The ileocecal junction was visualized and exhibited normal intact wall layering and is subjectively of normal thickness. Sections of colon are visualized with formed fecal material to liquid fecal material and gas shadowing distally. There is no observed focal or generalized colon wall thickening or loss of layering.

### **Pancreas**

The pancreas is prominent and mottled compared to the surrounding isoechoic mesentery. There is no evidence of nodules or cystic lesions. The surrounding mesentery was hyperechoic.

### **Free Abdomen**

Evaluation of the peritoneal cavity revealed trace free fluid. There is no significant mesenteric lymphadenopathy. The omentum is of increased echogenicity around the stomach, pancreas and thickened bowel loops.

### **Other**

Both testicles are visualized and appear normal.

## **ULTRASONOGRAPHIC FINDINGS**

### **PRIMARY FINDINGS:**

- Stomach wall thickening. Appearance and presentation favors acute gastritis.
- Focal areas of thickened, inflamed small intestine. The bowel wall thickening could be consistent with inflammation, edema, or infiltrative neoplasia. The appearance favors a severe enteritis although a foreign body or other cannot be excluded as a possibility.
- Prominent, mottled pancreas with surrounding, hyperechoic mesentery. The pancreatic changes are most consistent with mild pancreatitis/pancreatic infiltration. I recommend fPLI testing and

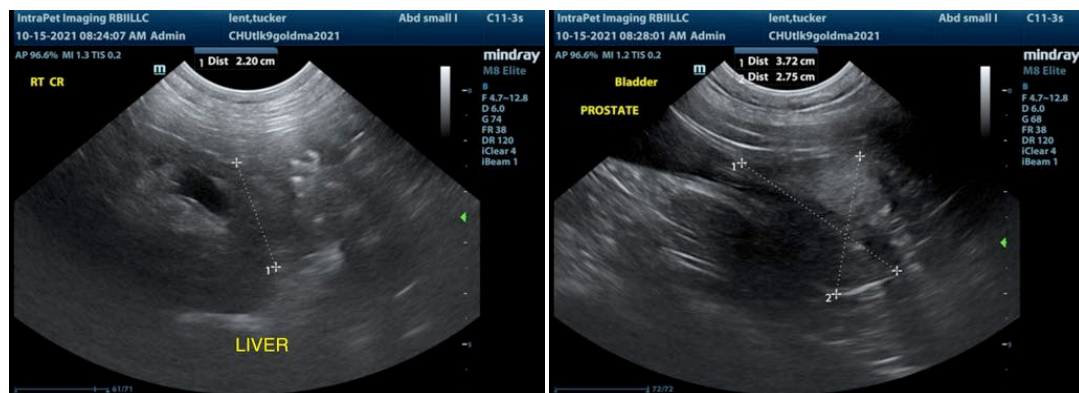
continued monitoring for improvement or possible development of a pancreatic abscess. Consider FNA if not improving.

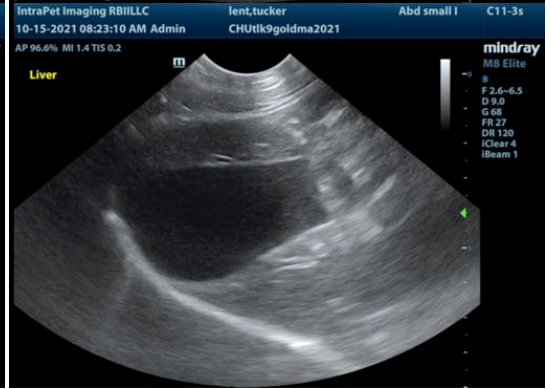
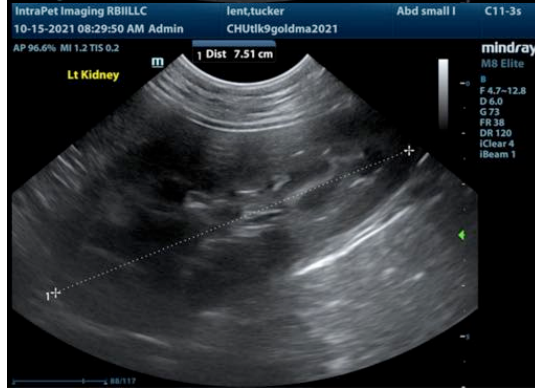
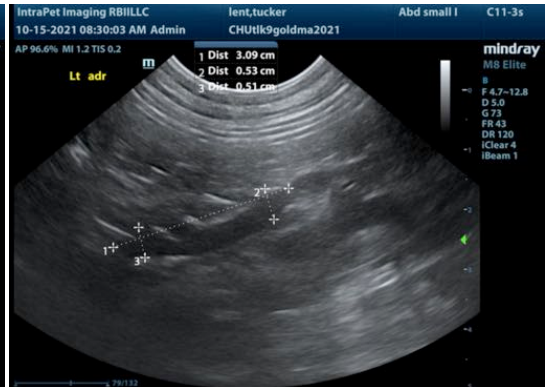
#### SECONDARY FINDINGS:

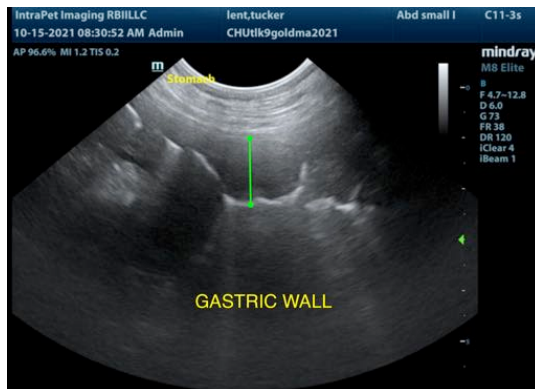
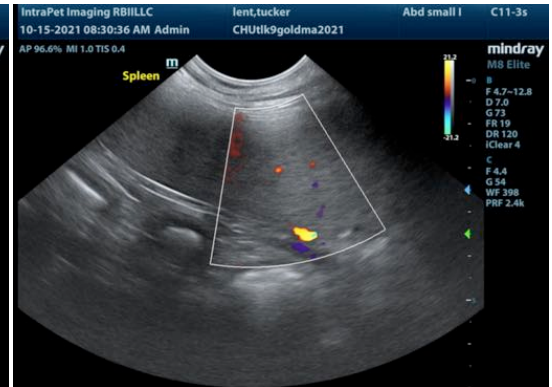
- Large hyperechoic prostate. Prostatic changes are most consistent with benign prostatic hyperplasia. Other differentials include bacterial prostatitis and prostatic neoplasia. However, given the lack of lower urinary tract symptoms, these differentials are considered less likely in this patient.
- Borderline flat adrenal glands. This is likely normal for this young dog, but I recommend screening for Addison's disease.
- Heterogenous liver with poorly defined, isoechoic bulge in the liver margin. The diffuse hepatic changes are non-specific and could be consistent with vacuolar hepatopathy, nodular hyperplasia, inflammatory/immune-mediated disease, fibrosis, extramedullary hematopoiesis, toxic hepatopathy (e.g., copper), infiltrative neoplasia (less likely) or other hepatopathy. The isoechoic bulge is of unknown significance and should be monitored as a neoplastic lesion cannot be 100% ruled out, yet this is unlikely.
- Colon distended with fluid. The findings are most consistent with impending or current diarrhea.

#### INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The stomach and small intestine both appear somewhat thickened and very inflamed. I suspect that this is consistent with severe gastroenteritis, but foreign material or infiltrative disease cannot be 100% ruled out. If blood work evaluation and testing for Addison's is negative and primary GI disease is suspected in young patients with acute signs I would strongly consider dietary indiscretion, ingestion of foreign material, GI parasitism, Addison's disease and pancreatitis/acute colitis gastroenteritis. Serial radiographs are recommended for evaluation of progressive obstruction/partial obstruction/foreign material is warranted. I recommend symptomatic therapy and close monitoring. If symptoms persist then reevaluate and consider surgery/endoscopy to obtain biopsies and evaluate for foreign material.







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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