

**DATE PRESENTING CLINICAL SIGNS**

10/13/21

Main concerns - abdominal distension and small/hard stools

**PATIENT**

Tucker Battista

Has been having issues with diarrhea (on/off for months) but today and last 2 days small/harder BMs. Last night very hard but was inside litter box (others were outside). He is acting lethargic. Sniffs at food but does not eat much - used to eat half of a can and chicken. now just a little tuna, chicken, probiotic. Last few days to weeks - sides seem to be bulging. Feels kind of firm to owner. Owner was away for a couple of days. Owner thinks he lost weight but was around 9# when she weighed at home. Diet: biome canned, and id canned. No vomiting. Not jumping up as much on things. Assessment: Abdominal distension - effusion (marked) - suspected ascites, r/o other. Suspect due to neoplasia vs. right sided heart failure vs. (less likely) severe gi disease, parasites, other. Extra heart sound (gallop); radiographic cardiomegaly. Anemia - unknown if regen or non regen. Small/hard stools; history of diarrhea that was regulated. Elevated ALT (mild). Elevated crea and BUN (mild) - suspect pre-renal, r/o renal vs. gi bleed (BUN). Decreased muscle mass. History of low cholesterol, low HCT (33).

**SPECIES**

Feline

**BREED**

DSH

**SEX**

Neutered Male

Current Medications: B12 sq today, Mirataz daily PRN at home (as of today), adding Metamucil to food. Lab Results: PCV/TS - 23%, 7.8 Rotor: ALT 120 H, AMY 1107 H, Alb 3.9 N, Crea 1.8 H, BUN 54 H, Glu 83, Glob 3.7 N, TP 7.6, K 4.9, other WNL. Labs from Feb 2021 attached separately.

Radiographs: from 10/8/21: Lateral and VD abdominal radiographs: marked peritoneal effusion; gas dilated colon with multiple fecal balls; poor serosal detail throughout the abdomen. Suspect cardiomegaly (caught in part of VD).

**AGE**

4/21/05

Date of Previous IntraPet Ultrasound: No previous IntraPet scans.

Sedation:

Stat Report:

**WEIGHT**

9.3 Pounds

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

The urinary bladder is moderately distended with mild primarily suspended echogenic debris present. 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 calculi. Echogenic debris of this type can be associated with small crystals, cellular debris and proteinaceous debris.

The left kidney has a normal shape and size (4.57 cm). Overall echogenicity is slightly hyperechoic with poor corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is mild perinephric inflammation and effusion and possible scant subcapsular effusion as well. A small pinpoint nephrolith is noted. There is no evidence of pyelectasia, infarcts or hydroureter. Renal vasculature is normal.

The right kidney has a normal shape and size (4.82 cm). Overall echogenicity is slightly hyperechoic with poor 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.

**Adrenal Glands**

The left adrenal gland is normal in size measuring 0.41 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.

The right adrenal gland is normal in size measuring 0.44 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.

**INTERPRETED BY**

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(Small Animal Internal  
Medicine)

**HOSPITAL NAME**

Pet Vet of Clarksville

**REFERRING VET**

Dr. Olney

**INVOICE**

26242

### ***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 large in size, and normal in echogenicity with rounded margins. The parenchyma is heterogenous in echotexture with subtle, indistinct focal mottling. The vasculature is prominent and appears somewhat dilated/congested. Occasional small hyperechoic foci are visualized. One measured 0.37 cm x 0.41 cm.

The gallbladder lumen is moderately distended. The wall of the gall bladder 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. It measures at a normal thickness of <0.36cm with some variability due to the presence of rugal folds. The distinction of the gastric wall layers is adequate and there is no impression of reduced peristaltic activity. No masses or focal lesions were observed.

The visualized areas of duodenum, jejunum and ileum have a uniform diameter with minimal fluid distension. Wall thickness is normal to slightly increased. Bowel loops follow a typical curvilinear path with distinct wall layering, but some areas display a prominent muscularis layer which does not display the typical 1:3 muscularis:mucosa layer ratio. Duodenum wall measures 0.32 cm. Jejunum wall measures 0.31 cm. Visualized peristalsis appears appropriate. 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 and gas shadowing distally. There is no observed focal or generalized colon wall thickening or loss of layering.

### ***Pancreas***

The pancreas is prominent and hypoechoic as compared to the surrounding isoechoic mesentery. There is no evidence of nodules or cystic lesions. There is no evidence of regional mesenteric inflammation or fluid.

### ***Free Abdomen***

There is a large volume of slightly echogenic free fluid. Mild mesenteric lymphadenopathy is present with mesenteric lymph nodes measure d0.89, 0.67, and 0.50 cm. The omentum is generally of increased echogenicity.

### ***Other***

Pleural effusion is noted cranial to the diaphragm.

## **PRIMARY FINDINGS**

- Decreased corticomedullary distinction in both kidneys with scant subcapsular fluid around the left kidney – Mild loss of corticomedullary distinction in both kidneys could be consistent with chronic degenerative disease or interstitial nephrosis. Fluid observed under the renal capsule can be seen most commonly in cases of neoplasia but can also be seen with urine leakage, hemorrhage, abscessation, Acute kidney injury with a ureteral obstruction, toxicities and leptospirosis.
- Prominent muscularis layer to the small intestine – The small intestinal wall changes are most consistent with an inflammatory process (i.e., inflammatory bowel disease) with a low possibility of emerging lymphoma. This can be a normal finding in some older cats.

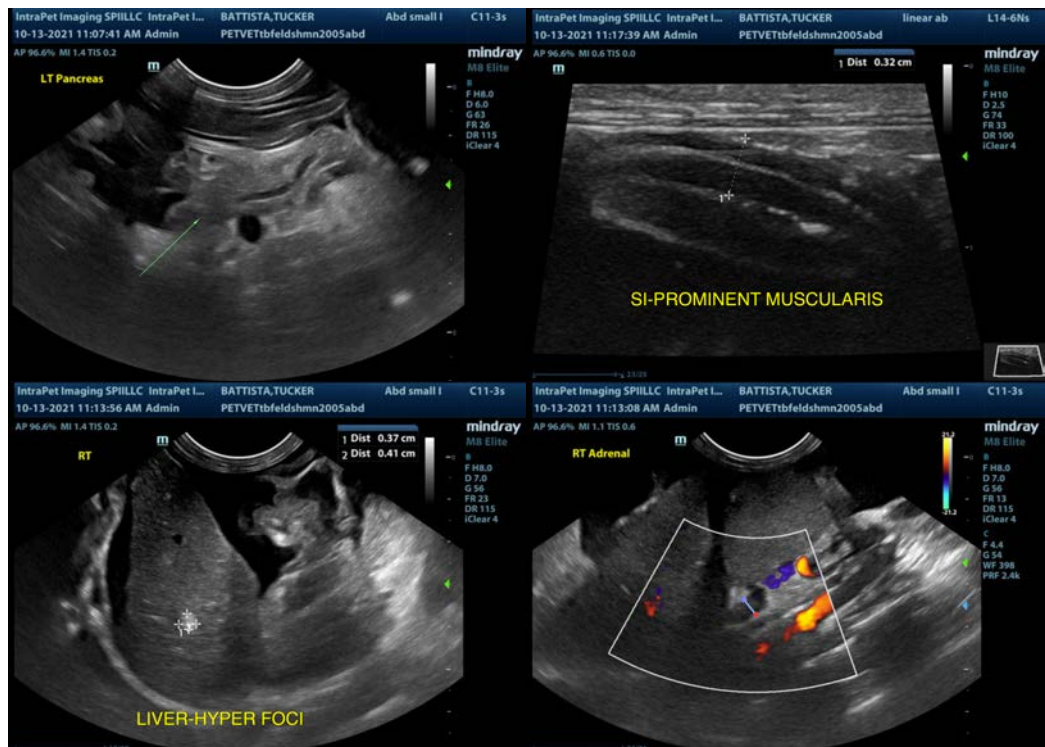
- Prominent, hypoechoic pancreas – The pancreatic changes are most consistent with mild pancreatitis or a recent episode of pancreatic inflammation.
- Large, heterogeneous liver with prominent vasculature and hyperechoic foci – The diffuse hepatic changes are non-specific and could be consistent with vacuolar hepatopathy, nodular hyperplasia, inflammatory/immune-mediated disease, fibrosis, extramedullary hematopoiesis, toxic hepatopathy (e.g., copper), infiltrative neoplasia (less likely) or other hepatopathy. The combination of abdominal effusion and prominent liver vasculature increases concern for congestion and concern for heart disease.
- Pleural and peritoneal effusion – recommended fluid analysis and cytology.

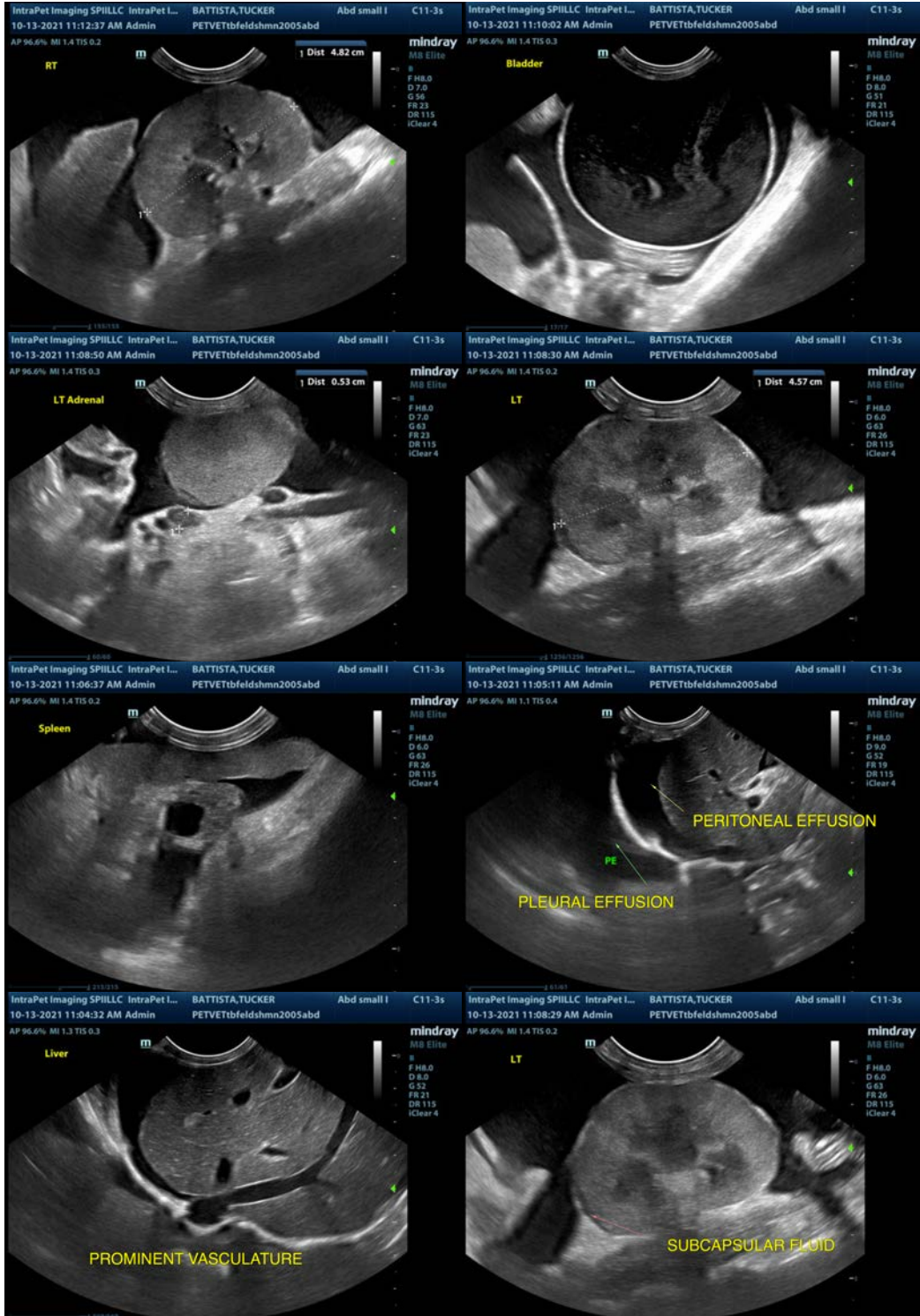
## SECONDARY FINDINGS

- Echogenic debris in the urinary bladder – The echogenic debris in the bladder lumen could be consistent with cells, crystals, and/or mucus.
- Mild mesenteric lymphadenopathy – The prominent abdominal lymph nodes are most consistent with reactive lymphadenitis or lymphoid hyperplasia. Neoplastic infiltration is considered less likely.

## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The liver is large and heterogeneous with prominent vasculature. This, in combination with the pleural and peritoneal effusion increases concern for possible cardiac or pericardial disease. There also is the possibility of infiltrative disease affecting the liver and kidneys. If this is a concern after evaluation of the heart, recommend a fine needle aspirate. No discreet mass lesions were observed.





**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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