



**DATE PRESENTING CLINICAL SIGNS**

8/15/23 Discharged 2 days ago after hospitalization for Lily ingestion. Was fine yesterday but today has vomited and had diarrhea and is not eating. Slept a lot today and is generally just not acting like his normal self.

**PATIENT**

Zeus Citrano  
Current Medications: Ampicillin, Metronidazole, Ondansetron, Gabapentin, Cerenia, BeneBac.  
Lab Results: See attached.

**SPECIES**

Feline  
Date of Previous IntraPet Ultrasound: No previous.  
Sedation: Not required to complete full diagnostic ultrasound.  
Stat Report: Not requested.  
Imaging Performed By: Rachel Brillhart, RDMS.

**BREED**

DSH

**SEX**

Neutered Male

**AGE**

12/15/08

**WEIGHT**

7.95 Pounds

**INTERPRETED BY**

Kathleen Sennello DVM,  
MS, Diplomate ACVIM  
(Small Animal Internal  
Medicine)

**HOSPITAL NAME**

Animal Emergency  
Hospital

**REFERRING VET**

Dr. Martinoli

**INVOICE**

44650

**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.

The left kidney is irregular with a mottled, irregular cortex and decreased corticomedullary distinction, as well as pyelectasia at 0.14 cm. The left kidney measures 2.9 cm in length. There is no evidence of focal perinephric inflammation or effusion. There is no evidence of nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The right kidney is normal in size but irregular, with mottled cortex and decreased corticomedullary distinction, measuring 3.9 cm in length, with mild pyelectasia at 0.26 cm. There is no evidence of focal perinephric inflammation or effusion. There is no evidence of nephroliths, infarcts or hydroureter. Renal vasculature is normal.

**Adrenal Glands**

The left adrenal gland is normal in size measuring 0.34 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 0.60 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.

**Spleen**

The spleen is subjectively normal in size (0.61 cm), 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 homogenous echotexture. The visible portions of the vasculature and biliary tract appear normal. There is a 1.39 cm cystic structure visualized within the parenchyma.

The gall bladder lumen is moderately distended. The wall of the gall bladder is not thickened and has a smooth mucosal surface. There is a moderate amount of non-organized echogenic debris. 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 relatively uniform diameter with minimal fluid distension. Wall thickness is normal. Bowel loops follow a curvilinear path with distinct wall layering maintaining the typical 1:3 muscularis:mucosa layer ratio. Duodenum wall measures 0.32 cm. Jejunum wall measures 0.22 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 large and hypoechoic to surrounding mesentery. The parenchyma appears generally severely mottled and irregular with some ill-defined hypoechoic nodules. There is evidence of regional mesenteric inflammation. Consistent with moderate to severe pancreatitis.

### ***Free Abdomen***

Evaluation of the peritoneal cavity did not reveal any evidence of effusion, or subjective lymphadenomegaly. The Medial iliac nodes appear normal and there was no evidence of a caudal aortic thrombus at the bifurcation. The omentum is of normal uniform echogenicity.

### ***Other***

There is a scant amount of free abdominal fluid. There is a significant diffuse lymphadenopathy present with a cluster of large hypoechoic lymph nodes near the ileocecal junction measuring 0.69 cm and 0.64 cm. Mesenteric lymph nodes measure 0.79 and 0.55 cm. A cranial abdominal lymph node measures 1.89 cm x 1.23 cm. The omentum is severely hyperechoic around the pancreas.

## **PRIMARY FINDINGS**

- Severely enlarged, irregular, mottled pancreas with ill-defined hypoechoic nodules and surrounding reactive mesentery – The pancreatic changes are most consistent with moderate to severe pancreatitis/pancreatic inflammation. Recommend fPLI testing and continued monitoring for improvement or possible development of a pancreatic abscess. Consider fine needle aspirate if not improving.
- Irregular, mottled kidneys with decreased corticomedullary distinction and mild pyelectasia – Mild loss of corticomedullary distinction in both kidneys could be consistent with chronic degenerative disease or interstitial nephrosis. Pyelectasia of the kidney(s) could be consistent with pyelonephritis, chronic renal disease, secondary to PU/PD or fluid therapy (if applicable), other.
- Moderate diffuse lymphadenopathy – The moderate mesenteric lymphadenopathy could be concerning for a neoplastic process, although you can see significant lymphadenopathy in some

cases of autoimmune/inflammatory disease, infectious disease (tick born disease-such as bartonella, fungal infections, FIP (cats)) etc. A fine needle aspirate with cytology is recommended for further evaluation.

## SECONDARY FINDINGS

- Small anechoic structure visualized within the hepatic parenchyma – Findings are most consistent with benign hepatic cysts.
- Moderate gallbladder debris – The significance of the aggregated gallbladder debris is unclear. This could represent an early mucocele, cholestasis, or may be secondary to fasting. Incidental gall bladder debris is less common in cats.

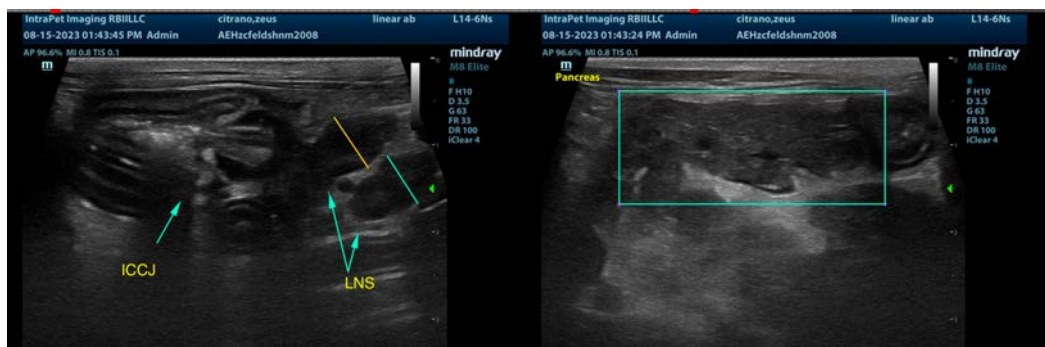
## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

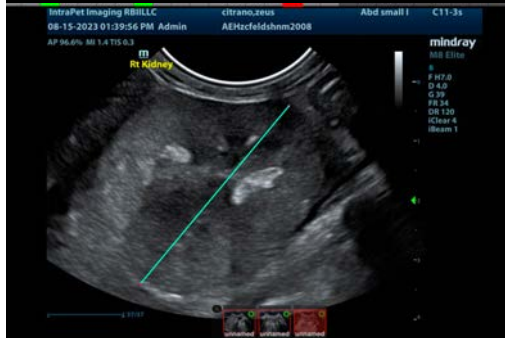
The pancreas appears severely enlarged, irregular, and mottled with ill-defined hypoechoic nodules and hyperechoic reactive mesentery. Findings are consistent with moderate to severe pancreatitis, although pancreatic neoplasia cannot be definitively ruled out. Recommend aggressive medical therapy for pancreatitis and consider a fine needle aspirate of the pancreas, particularly if there is minimal response to therapy.

Both kidneys have parenchymal changes and mild pyelectasia as well as decreased corticomedullary distinction. These changes are consistent with chronic renal disease. Recommend a blood pressure, urinalysis and culture. Mild pyelonephritis cannot be excluded as a possibility.

There is a moderate mesenteric lymphadenopathy present. Consider a fine needle aspirate of a mesenteric lymph node.

Recommend three view thoracic radiographs to evaluate for possible concurrent thoracic disease/involvement.





**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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