

**DATE PRESENTING CLINICAL SIGNS**

4/20/23

Acute onset of vomiting, lethargy and seeming in distress history of pancreatitis and gall bladder stone- a couple of years ago- has been on ursodiol - had an ultrasound follow up- stone was breaking apart- continue on the ursodiol was in recently due to coughing; xrays- possible asthma- was started on 3 week course of doxycycline- had follow up xrays and was recommend to watch the breathing owner went into the office today- cat was fine this morning; got a call from father- the cat was vomiting and seemed to be in distressed; when owner got home- cat was quiet and lethargic; not interest in eating; crying; had urinate not aware of getting into anything sees Dr. Sinclair frequently does not like buprenorphine- makes the cat act very odd and crazy- does not want the cat to get it had bloodwork a couple of weeks ago- per owner normal.

**PATIENT**

Spooky Cook

**SPECIES**

Feline

Current Medications: Cerenia, Ondansetron, Gabapentin.

**BREED**

Lab Results: See attached.

DSH

Radiographs: patchy changes noted in the lung- particularly in the right cranial/caudal lung lobe and left caudal lung lobe region mineralized density noted in the liver region on the v/d thickened intestines increased fat pad noted in the cranial abdomen stool noted in the colon.

**SEX**

Date of Previous IntraPet Ultrasound: No previous.

Neutered Male

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

Imaging Performed By: Andi Parkinson, BS, RDMS.

**AGE**

10/14/14

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN****WEIGHT**

18.9 Pounds

**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.

**INTERPRETED BY**

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

The left kidney has a normal shape and size (4.65 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of focal perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

**HOSPITAL NAME**

Animal Emergency  
Hospital

The right kidney has a normal shape and size (4.7 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of focal perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

**REFERRING VET**

Dr. Willer

**Adrenal Glands**

The left adrenal gland is normal in size measuring 0.55 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.

**INVOICE**

46812

The right adrenal gland is normal in size measuring 0.61 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 large (1.0 cm in width at the level of the hilus), 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. No focal nodules or cystic lesions are observed.

The gallbladder lumen is moderately distended. The wall of the gall bladder is not thickened and has a smooth mucosal surface. There is some dependent shadowing material visualized within the gallbladder, most consistent with small mineralizations/stones. 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. Jejunum wall measures 0.27 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. There is no evidence of nodules or cystic lesions. There is evidence of regional mesenteric inflammation. Consistent with moderate pancreatitis. Prominent pancreatic duct measuring 0.29 cm.

### **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 mesentery is diffusely hyperechoic, particularly around the pancreas.

## **PRIMARY FINDINGS**

- Large, hypoechoic pancreas with a prominent pancreatic duct surrounded by hyperechoic mesentery – The pancreatic changes are most consistent with moderate 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.
- Echogenic debris in the urinary bladder – The echogenic debris in the bladder lumen could be consistent with cells, crystals, and/or mucus.
- Shadowing mineralization associated with the gallbladder – Findings are most consistent with small mineralizations/stones.
- Prominent muscularis layer to the small intestine – The small intestinal wall changes could be consistent with an underlying inflammatory process. These types of changes can sometimes be seen in normal older cats. Correlate with clinical signs.
- Diffusely hyperechoic mesentery and hyperechoic mesentery surrounding the pancreas

## SECONDARY FINDINGS

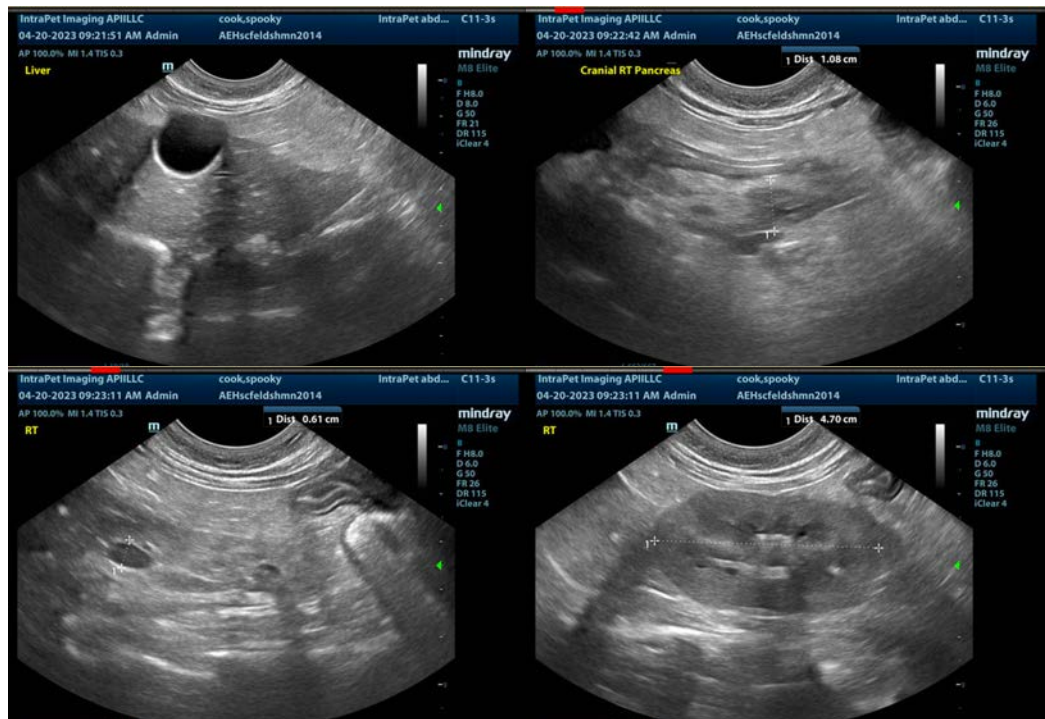
- The spleen appears relatively normal other than being large – This is likely within normal limits for this very large cat.

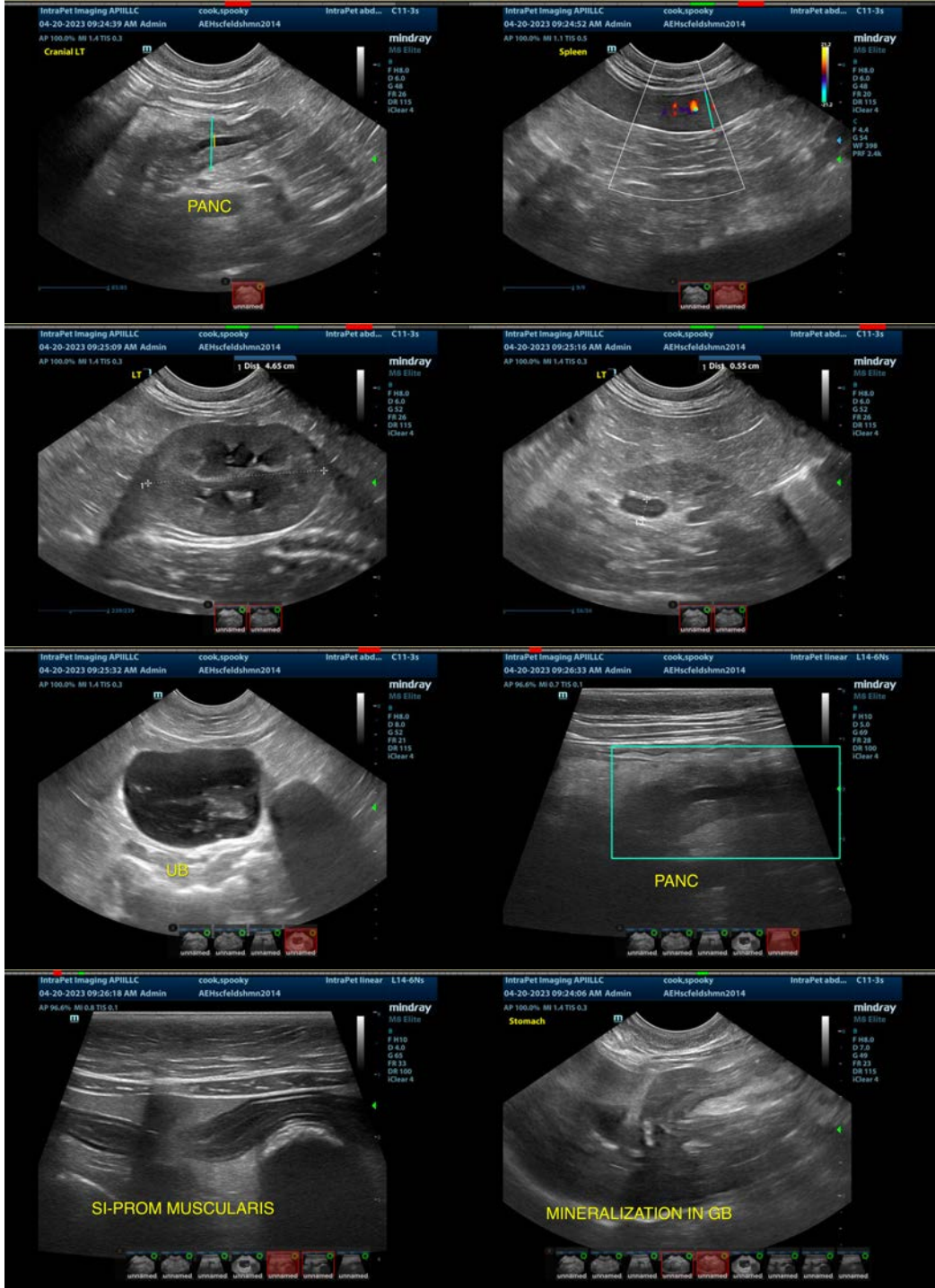
## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The pancreas is very prominent, hypoechoic, and large, with surrounding hyperechoic mesentery. These findings are most consistent with moderate pancreatitis. Recommend treatment for pancreatitis with fluids, pain medications, nausea medications, etc. There is some small mineralization in the region of the gallbladder, but no evidence of a biliary obstruction or inflammation. Correlate these findings with bloodwork, looking for liver enzyme elevations.

The muscularis layer of the small intestine appears somewhat prominent. This can be a normal finding in some older cats, but if GI signs persist despite resolution of the pancreatic inflammation, consider the possibility of a primary enteropathy, and consider further evaluation for this problem.

There is a moderate amount of suspended echogenic debris visualized in the urinary bladder. Recommend urinalysis and culture.





**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.

Kathleen Sennello DVM,MS, Diplomate ACVIM (Small animal Internal Medicine)  
kathleen.sennello@sonopath.com