

**DATE PRESENTING CLINICAL SIGNS**

2/14/23 Weight loss muscle wasting, palpable spine and skull sutures. Possible mesenteric In enlargement. Peripheral nodes WNL. Focal thickening intestine cranial abdomen. No teeth on oral exam.

**PATIENT**

Moe Hann Current Medications: Cobalamin Inj every 7 days under skin 0.25cc  
Lab Results: SDMA, Creatinine & Bun increase values, highest ever, Lipase out of range- off graph, and Low normal T3 and T4

**SPECIES**

Feline Date of Previous IntraPet Ultrasound: 8/24/22. See attached.  
Sedation: Not required to complete full diagnostic ultrasound.  
Stat Report: Not requested.

**BREED**

DLH

**SEX**

Neutered Male

**AGE**

3/3/13

**WEIGHT**

4.8 kg

**INTERPRETED BY**

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

**HOSPITAL NAME**

Cat Hospital at Towson

**REFERRING VET**

Dr. Brunt

**INVOICE**

45124

**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 (likely due to previous infarcts and malformation/dysplastic kidney) with significantly reduced corticomedullary distinction. The left kidney measures 3.74 cm. There is no evidence of focal perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths or hydroureter. Renal vasculature is normal.

The right kidney has a normal shape and size (3.9 cm). Overall echogenicity is slightly hyperechoic with poor 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.

**Adrenal Glands**

The region of left adrenal (Cranial to left renal artery) is unremarkable but the adrenal is not distinctly visualized. No evidence of a mass effect is visualized.

The region of the right adrenal (between right cranial kidney and vena cava) is unremarkable, but the adrenal is not distinctly visualized. No evidence of a mass effect is visualized.

**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. There is a focal hyperechoic nodule visualized measuring 1.68 cm x 1.43 cm. This is relatively stable from the previous measurement at 1.77 cm x 1.4 cm.

**Liver**

The liver is subjectively normal in size, and echogenicity with smooth peripheral margins. The parenchyma is mildly heterogenous in echotexture with subtle, indistinct focal mottling. The visible portions of the vasculature and biliary tract appear normal. There is a multiloculated cystic lesion visualized measuring 2.46 cm in diameter. An adjacent lesion next to it measures 2.26 cm in diameter. This is relatively stable, as the cyst was previously measured at 2.2 cm in diameter on the previous scan.

The gallbladder lumen is moderately distended. The wall of the gall bladder is not thickened and has a smooth mucosal surface. Luminal contents are mild and 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. 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, irregular, and hypoechoic with a prominent pancreatic duct. There is no evidence of nodules or cystic lesions. The surrounding mesentery is slightly hyperechoic.

### ***Free Abdomen***

Evaluation of the peritoneal cavity did not reveal any evidence of effusion. There is a moderate mesenteric lymphadenopathy with mesenteric lymph nodes measuring 0.51 cm and 0.60 cm. The omentum is hyperechoic around the abnormal pancreas.

## **PRIMARY FINDINGS**

- Decreased corticomedullary distinction in both kidneys with an irregular left kidney (likely dysplastic and infarcted) and left-sided nephroliths – Mild loss of corticomedullary distinction in both kidneys could be consistent with chronic degenerative disease or interstitial nephrosis.
- Large hypoechoic irregular pancreas with a prominent pancreatic duct – Findings are most consistent with moderate pancreatitis, although much of the pancreatic changes could also be consistent with remodeling due to chronic inflammation. Neoplasia seems less likely based on the chronicity of this issue.
- Heterogeneous liver with two small cystic lesions – The hepatic changes are consistent with age-related parenchymal remodeling and are not considered clinically significant at this time. The cystic lesions are most consistent with benign hepatic cysts and appear stable from the previous scan.
- Thickened small intestine with prominent muscularis layer – 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.
- Mild to moderate mesenteric lymphadenopathy – The prominent abdominal lymph nodes are most consistent with reactive lymphadenitis or lymphoid hyperplasia. Neoplastic infiltration is considered less likely.

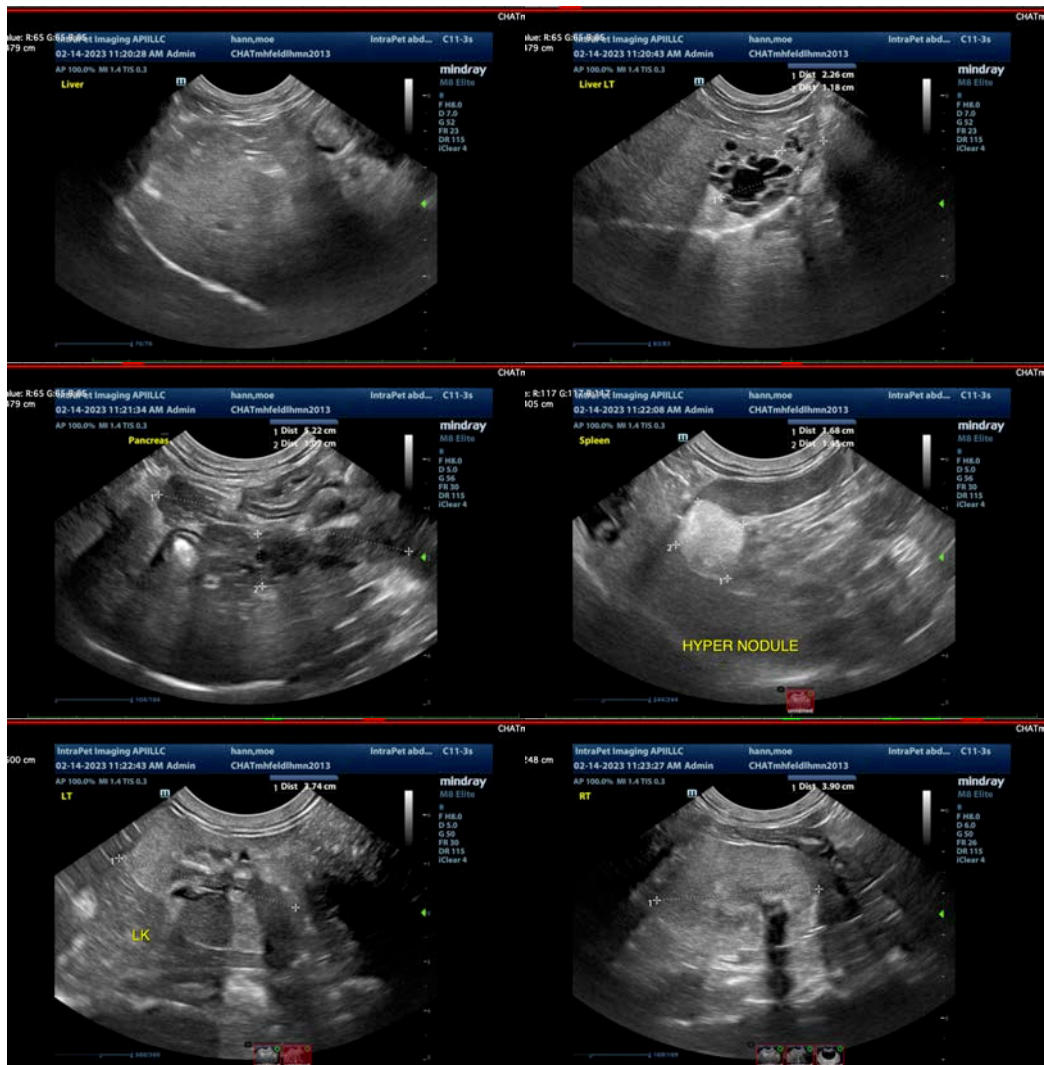
## **SECONDARY FINDINGS**

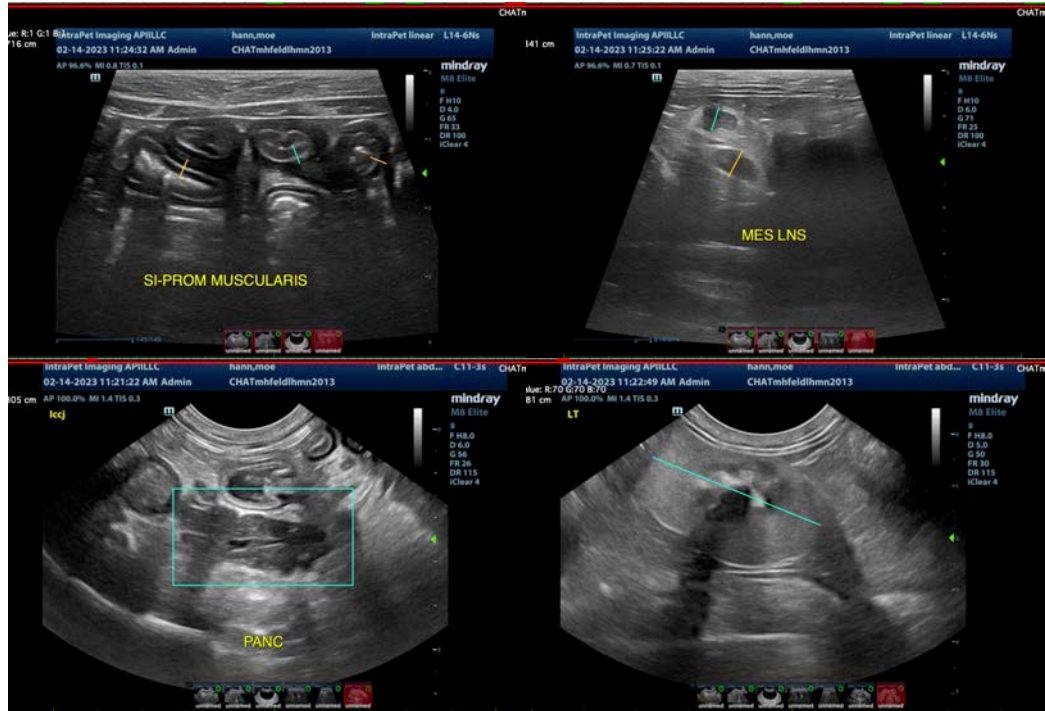
- Focal hyperechoic splenic lesion – This lesion is most consistent with a benign lesion and has not significantly changed in the last 6 months.

## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The pancreas is dramatically enlarged and hypoechoic with some evidence of surrounding inflammation. These findings are likely consistent with chronic pancreatitis. An underlying neoplastic process is possible but is unlikely to have been relatively stable for the last 6 months. Additionally, there are changes in both kidneys consistent with chronic progressive renal disease. Recommend a blood pressure, urinalysis and culture. It is possible that this pet is both clinical for its pancreatic and renal disease. Recommend treatment for pancreatitis and uremia secondary to chronic renal disease. Much of these treatments overlap including anti-nausea medication +/- pain medication, hydration, etc.

Additionally, the small intestine appears somewhat thickened and irregular. This could indicate concurrent GI disease. You could consider adding pre- and probiotic therapy to the regimen, as well as a lower protein, novel protein, or hydrolyzed protein prescription diet. GI biopsies will likely be necessary to definitively evaluate the GI tract and may not be possible with the coexisting systemic illness. The remaining changes described are relatively stable from the previous scan. Recommend recheck 3-view thoracic radiographs.





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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