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**DATE PRESENTING CLINICAL SIGNS**

10/13/22 Presented for weight loss (no hx of previous weight and not seen by a veterinarian before), eating less but still eating. Occasional diarrhea. On physical exam, ropey intestines and bcs 2/9 but otherwise nsf.

**PATIENT**

Pumpkin McCarthy

Current Medications: None.  
Lab Results: ALT (SGPT) 430, Alk Phosphatase 387, GGT 16, Total Bilirubin 0.7.  
Date of Previous IntraPet Ultrasound: No previous.  
Sedation: Not required to complete full diagnostic ultrasound.  
Stat Report: Not requested.

**SPECIES**

Feline

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**BREED**

DSH

**SEX**

Neutered Male

**AGE**

10/7/08

**WEIGHT**

7.4 Pounds

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Andi Parkinson RDMS

**HOSPITAL NAME**

Everhart Vet Hospital

**REFERRING VET**

Dr. Betta

**INVOICE**

42040

**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 has a normal shape and size (3.37 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.

The right kidney has a normal shape and size (4.02 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.

**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.

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.

**Spleen**

The spleen is borderline large (1.0 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 large in size, and normal in 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 a discrete hyperechoic nodule measuring 1.13 cm x 1.02 cm near the hilus.

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 mild amount of non-organized echogenic debris. The bile duct appears tortuous, dilated, and somewhat thick walled, measuring 0.36 cm.

### ***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 0.28 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 scant free fluid. There is a diffuse mesenteric lymphadenopathy with mesenteric lymph node measuring 2.99 cm x 1.44 cm. Additional mesenteric lymph nodes are visualized at 0.75, 0.78, 0.83, and 0.59 cm in width. The omentum is hyperechoic around the large lymph nodes.

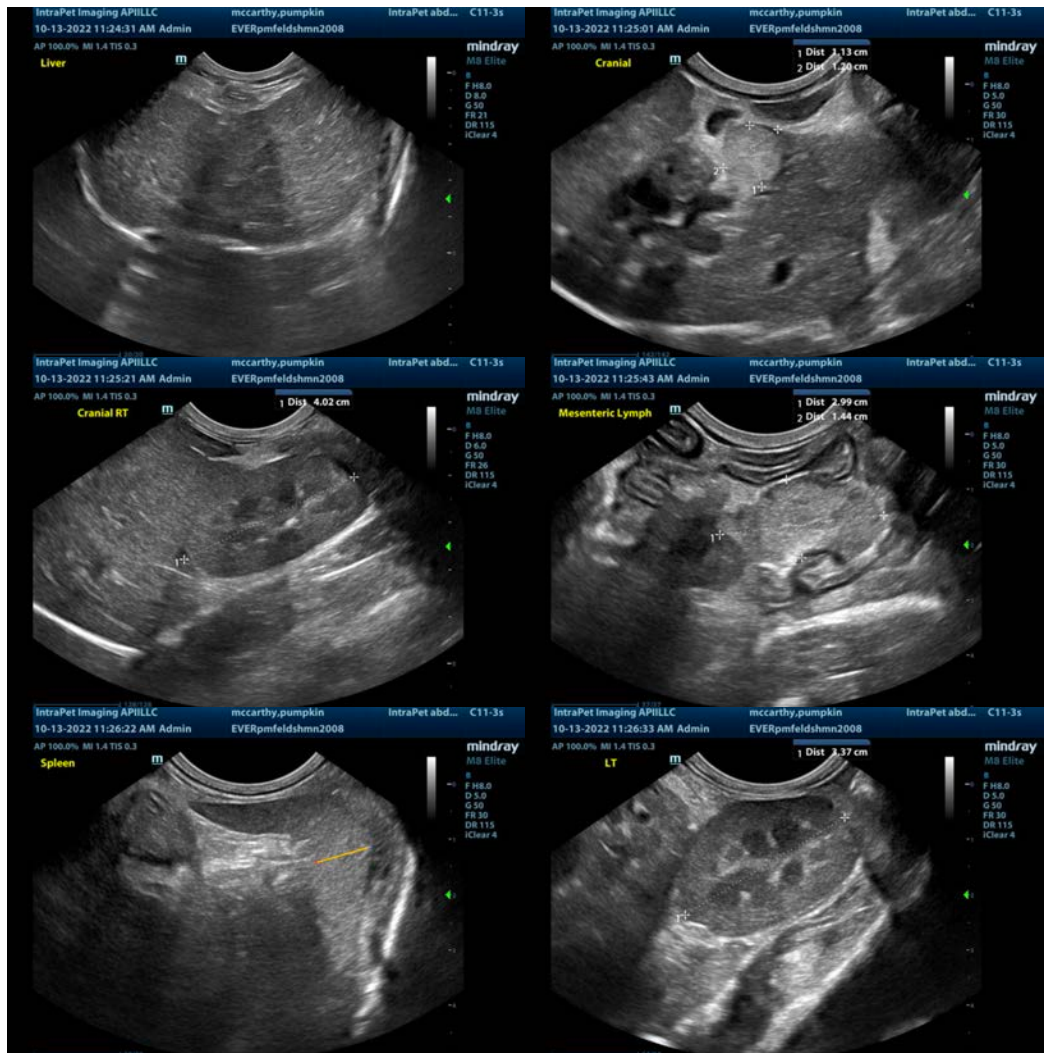
## **ULTRASONOGRAPHIC FINDINGS**

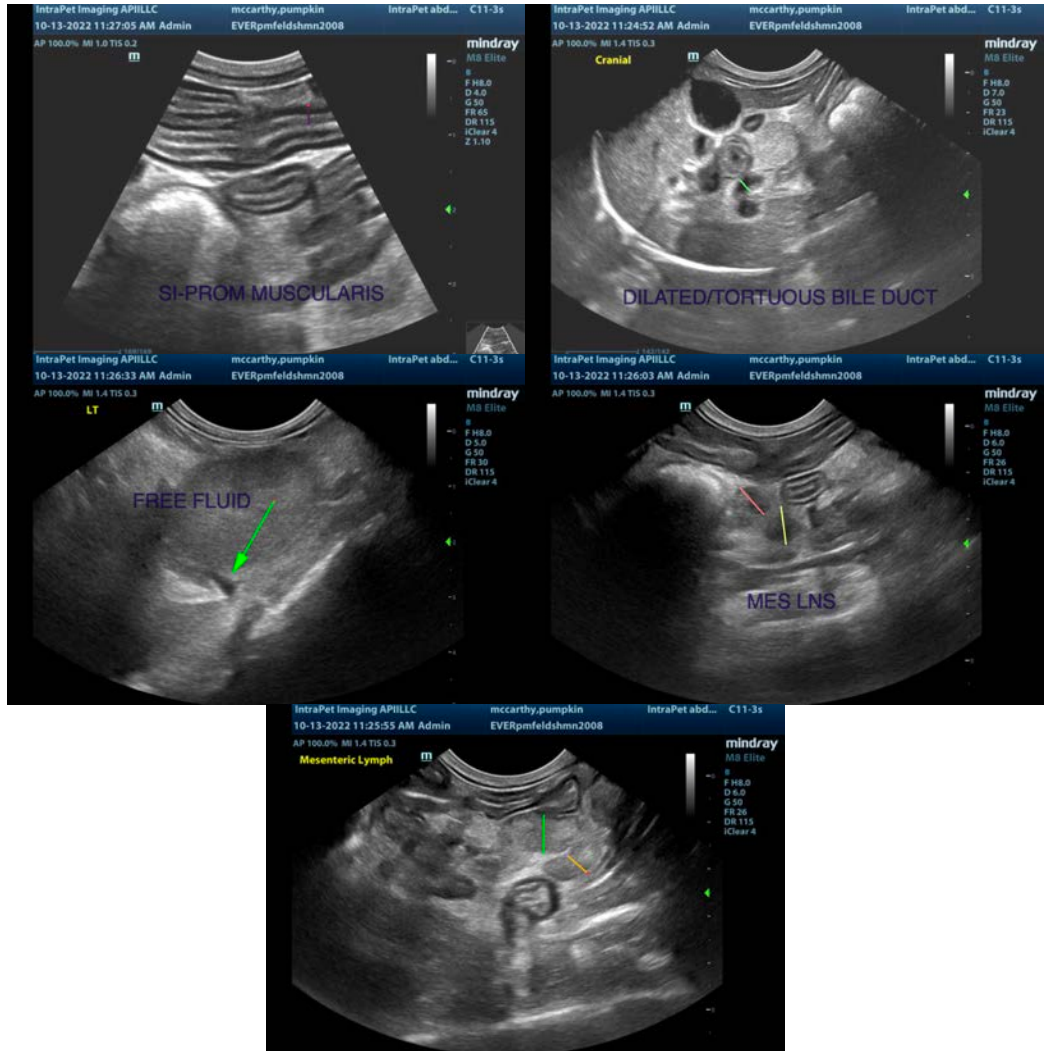
- Borderline large spleen – The spleen seems large for this average size cat. Consider possible infiltrative disease or congestion.
- Hypoechoic, prominent pancreas – The pancreatic changes are most consistent with age-related parenchymal remodeling, potentially secondary to a prior inflammatory episode, early fibrosis or chronic pancreatitis.
- Large, heterogeneous liver with focal hyperechoic nodule – Hepatic changes are non-specific and could be consistent with inflammation/infection (cholangiohepatitis), infiltrative neoplasia, lipidosis or other hepatopathy. The hyperechoic nodule could represent a benign or neoplastic lesion.
- Mild gallbladder debris with a distended, tortuous, thickened bile duct – Dilation of the common bile duct could be consistent with a functional obstruction (i.e. primary hepatic disease resulting in hepatocellular swelling) or with an extrahepatic bile duct obstruction (ie. choledocholith, bile duct tumor, pancreatic disease, other).
- Subjectively thickened small intestine with a 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.
- Scant free fluid
- Moderate abdominal lymphadenopathy – The moderate mesenteric lymphadenopathy is most 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.

## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

This patient has changes visualized in the liver, bile duct, small bowel, pancreas, and mesenteric lymph nodes. Additionally, the spleen appears somewhat prominent. Primary concern would be round cell neoplasia, although Triaditis or cholangiohepatitis would be possible differentials. Recommend a fine needle aspirate of a mesenteric lymph node and the liver. If a cytologic diagnosis cannot be obtained, you could also consider a fine needle aspirate of the spleen. If this is unsuccessful, surgical biopsies of these areas are recommended.

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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