



**PATIENT**

Momma Cat Howe

**SPECIES**

Feline

**BREED**

DSH

**SEX**

FS

**AGE**

15 years

**WEIGHT**

4.2 lbs.

**INTERPRETED BY**

R. McKenzie Daniel,  
DVM, DABVP  
(Canine and Feline)

**IMAGING  
PERFORMED BY**

Alex Emerson DVM

**HOSPITAL NAME**

AC of Casselberry

**REFERRING VET**

Alex Emerson DVM

**INVOICE**

**DATE**

12/3/21

**PRESENTING CLINICAL SIGNS**

Chronic Hx diarrhoea, chronic weight loss. BW 6 months ago only mild low albumin. New BW pending  
Abnormal PE/Chem/CBC/UA Results: BCS 2/9 otherwise normal exam

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**Urinary System**

The urinary bladder, trigone, and cystourethral junction exhibited normal thickness and tone. Anechoic urine was present in the lumen with no uroliths or sediment. The ureteral papillae were normal. The ureters were not visible which is normal. No evidence of inflammatory or neoplastic changes was noted.

The area of the aortic trifurcation was free of pathology.

Normal size and margination were present in the kidneys. A normal 1:3 cortex / medulla ratio and normal corticomedullary definition were maintained. The echogenicity of the cortex was similar to or slightly less than normal liver parenchyma while the medulla echogenicity was hypoechoic to the cortex with no evidence of pelvic dilation. A hyperechoic corticomedullary band, consistent with a medullary rim sign, was present. This is a nonspecific finding seen in both normal and abnormal kidneys. It may be associated interstitial renal disease, hypercalcemia, tubular necrosis, lymphoma, and FIP. However, it is a nonspecific finding. The left kidney measured 3.6 cm length. The right kidney measured 3.4 cm length.

**Adrenal Glands**

No overt pathology was noted in the area of the left or right adrenal glands.

**Spleen**

The spleen exhibited primarily finely textured parenchyma which was hyperechoic to the liver and renal cortical parenchyma. Mild generalized parenchyma heterogeneity was present without evidence of nodular changes. The capsule was smooth and regular without apparent expansion. The splenic vasculature at the hilus was normal in volume with no evidence of congestion or thrombosis. The parenchymal heterogeneity is likely consistent with benign changes such as extramedullary hematopoiesis or age-related remodeling with minor potential for inflammatory or neoplastic disease. The spleen was overall normal in size, measuring 0.8 cm width. No overt evidence of splenic neoplastic criteria was noted.

**Liver/ Gallbladder**

The liver exhibited potential for mild generalized enlargement. The parenchyma of the liver was subjectively normal in echogenicity compared to the spleen and renal cortices. The liver parenchyma was uniform with a mildly coarse echotexture. A solitary, discreet, hypoechoic, non-expansive, intraparenchymal nodule was present in the liver, measuring 1.3 cm in diameter. The capsule of the liver was symmetrically rounded to mildly swollen in margination. The hepatic and portal vasculature were normal in appearance without signs of congestion. The gallbladder was non-distended in size with primarily anechoic luminal content. The cystic and common bile ducts were normal.



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***Gastrointestinal***

The stomach presented intact wall layering with a normal wall layer ratio. The lumen of the stomach was empty with no signs of ileus, obstruction, or foreign material. The gastric body wall width measured 0.25 cm.

The small intestine presented primarily intact wall layering and maintained a 1:3 muscularis/mucosa ratio. Segmental mural hypertrophy and indistinct to obscured wall layering were present, along with mild ileal mural hypertrophy. The ileum wall width measured up to 0.38 cm width. The duodenum wall width measured 0.34 cm. The jejunum wall width measured 0.27 cm.

The colon walls presented intact yet prominent wall layering with mild thickened to echogenic submucosa. Segmental non-formed fecal matter was present in the colon lumen with lumen dilation.

***Pancreas***

The pancreas was normal in size and contour with isoechoic to heterogeneous parenchyma compared to adjacent omentum. No signs of active inflammation or neoplasia.

***Free Abdomen***

Small pockets of scant peritoneal free fluid were present.

Intermittent, mesenteric lymph nodes were present. The lymph nodes were essentially isoechoic to adjacent omentum without evidence of peripheral inflammation and maintaining a normal width: length ratio (<0.5). An example lymph node measured 1.8 cm x 0.8 cm.

**ULTRASONOGRAPHIC FINDINGS**

***Primary Findings***

- Chronic enterocolonopathy with moderate ileitis
- Associated mesenteric lymphadenopathy - lymphoid hyperplasia, reactive lymphadenitis, or potential early neoplastic lymphadenopathy possible
- Bilateral nonspecific medullary rim sign
- Potential mild hepatomegaly with nonspecific solitary intraparenchymal nodule
- Hypoechoic to heterogeneous pancreas -suspect low-grade to chronic active pancreatitis
- Scant peritoneal free fluid

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

Chronic inflammatory enteropathy (IBD, eosinophilic enteritis) Is suspected given the chronic history of diarrhea. However, potential for emerging neoplastic infiltrative enteropathy with round cells in the segmental jejunum and ileum cannot be excluded.

The nonspecific hepatic nodule may indicate focal area of hematopoiesis or nodular hyperplasia, although the possibility of emerging neoplastic nodule may be possible. Assuming normal clotting



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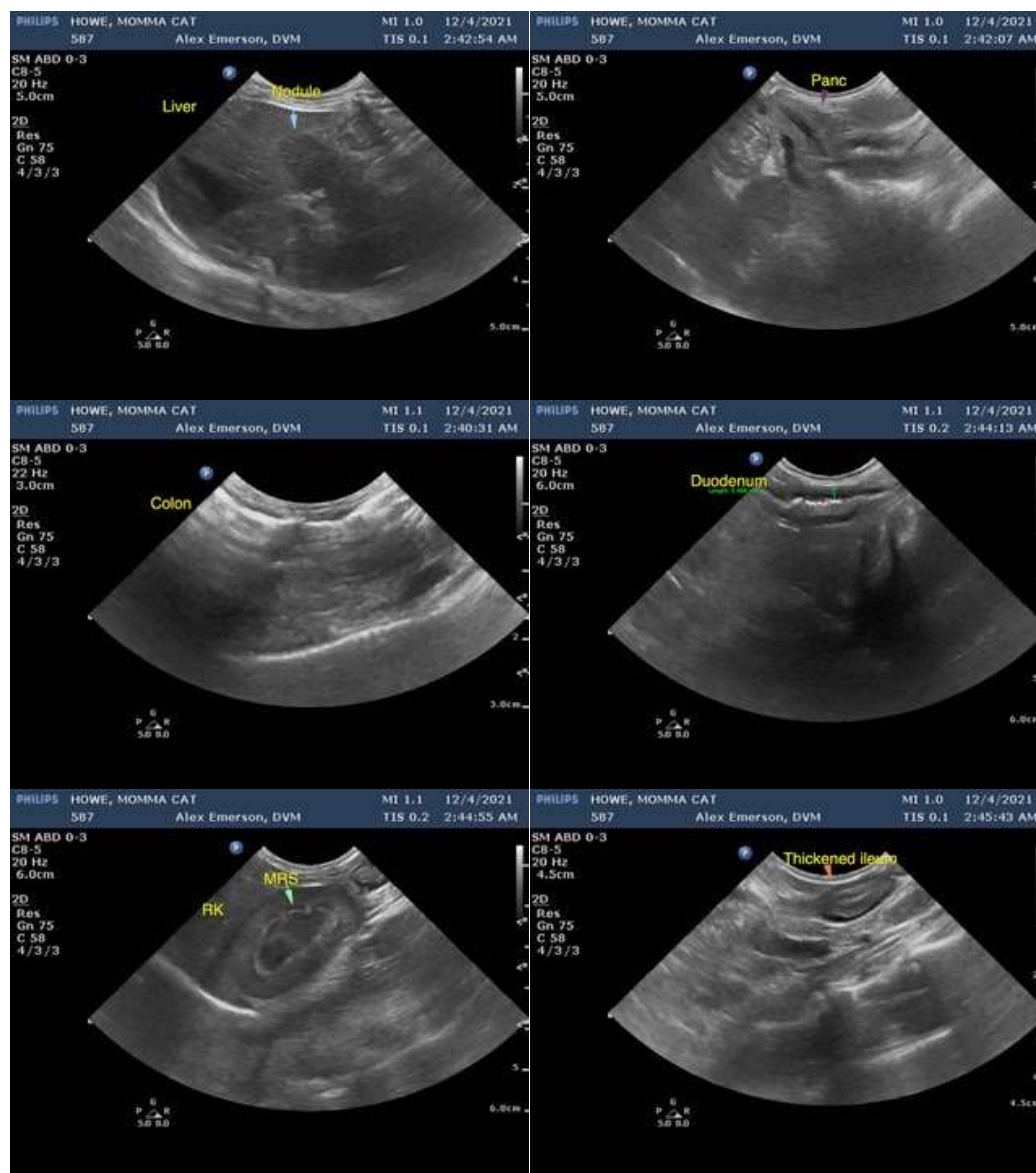
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status, ultrasound-guided FNA of the liver parenchyma specifically the nodule may be considered for further clarification. A GI panel to include PLI/TLI/Cobalamin/Folate and diarrhea PCR are warranted. Correlation with pending lab work is suggested. Empirically, IBD / Triaditis therapy protocol with assessment of clinical response may be considered.





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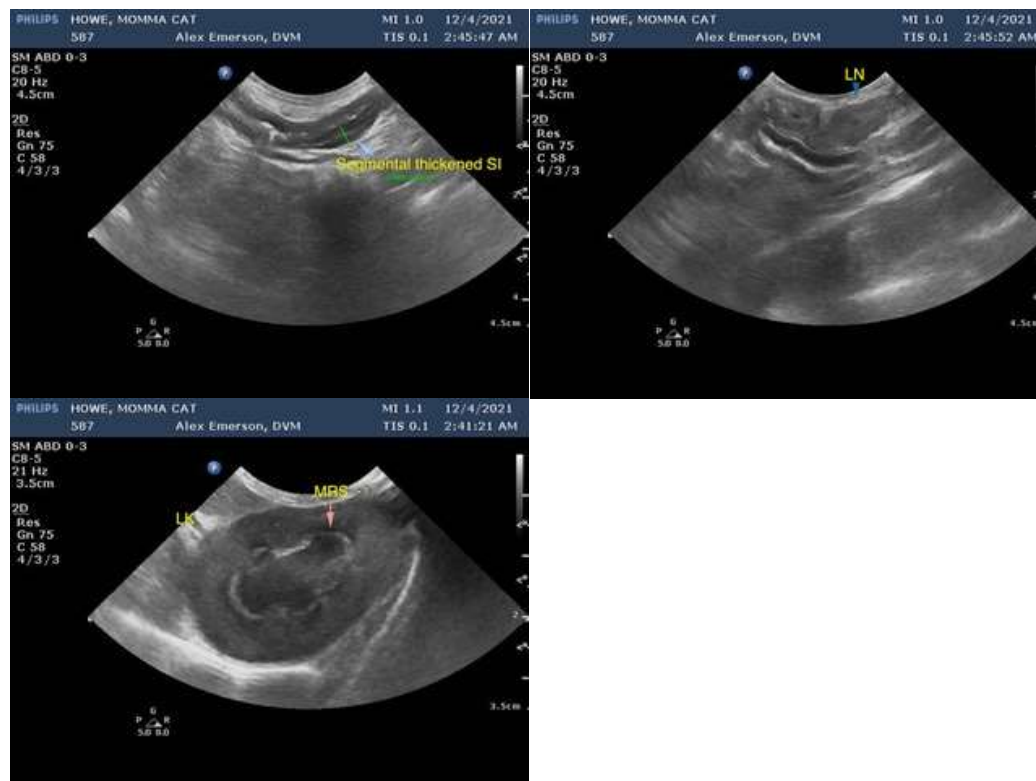
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**The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.**

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.

**R. McKenzie Daniel, DVM, DABVP (Canine / Feline Practice)**  
info@SonoPath.com