



**PATIENT PRESENTING CLINICAL SIGNS**

Charlie Chaloupka

**SPECIES**

Feline

**BREED**

DSH

**SEX**

Spayed Female

**AGE**

5 Years

**WEIGHT**

11.53 Pounds

Charlie has a history of elevated ALT. In June 2021 an ALT of 185 was found incidentally with routine wellness bloodwork. A denamarin trial and empirical deworming were done at that time. Sept 2021 the ALT normalized to 56. Charlie was seen for a wellness visit on 6/11/22 and ALT was once again elevated. Charlie has been clinically normal this entire time, with no weight loss or changes in behavior. Primary Question/Differential to Be Answered in This Exam r/o causes of elevated ALT in a young cat  
Abnormal PE/Chem/CBC/UA Results: ALT 172 June 11 2022. FIV/FelV snap test was negative 6/13/22.

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**Urinary System**

The urinary bladder is moderately distended with anechoic contents. No masses, inflammatory changes, echogenic sediment or cystoliths are observed. The urinary bladder, trigone and visible pelvic urethra are normal in thickness with a smooth mucosal surface.

The right kidney is normal in size (4.15 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed.

The left kidney is normal in size (3.8 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed.

**Adrenal Glands**

The right adrenal gland is normal in size (0.30 cm), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

The left adrenal gland is normal in size (0.41 cm), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

**Spleen**

The spleen is subjectively normal in size with a normal smooth capsular contour. Parenchyma is appropriately finely textured and homogenous with normal echogenicity relative to surrounding tissue (hyperechoic to liver). No focal nodules or masses are observed. Splenic vasculature appears normal.

**Liver**

The liver is subjectively normal in size with normal smooth curvilinear peripheral contour. Parenchyma is appropriately hypoechoic to the spleen in echogenicity and appropriately mildly coarse and homogenous in echotexture. No focal lesions are observed. Visible vasculature and biliary tree appear normal without distension or congestion.

The gallbladder is non-distended in size. The wall is smooth without visible thickening. Luminal contents are primarily anechoic. There is no evidence of cystic or common bile duct dilation.

**INTERPRETED BY**

Beth Johnson, DVM  
DACVIM

**IMAGING PERFORMED BY**

Jenna Walsh, CVT

**HOSPITAL NAME**

West Eugene AH

**REFERRING VET**

Dr. Sundholm

**INVOICE**

38736

**DATE**

6/15/22



**PATIENT**

***Gastrointestinal***

Charlie Chaloupka

The stomach wall is normal in thickness (canine < 0.5 cm and feline < 0.4 cm) and layering. The lumen of the stomach is empty with no evidence of obstruction, foreign material or infiltrative disease. Pyloric outflow tract appears patent.

**SPECIES**

Feline

The visible small intestines are normal in wall thickness. Normal layering is maintained except for a diffusely disproportionately thick muscularis layer relative to mucosa. Small intestinal motility appears adequate (1-3 contractions per min). The lumen of the small intestine is empty with no evidence of obstruction, foreign material or infiltrative disease.

**BREED**

DSH

The visible colon is normal in wall thickness (< 0.2 cm) and layering. Contents are consistent with normal formed feces and gas.

**SEX**

Spayed Female

***Pancreas***

The pancreatic parenchyma is appropriately isoechoic to surrounding tissue. Visible capsule is smooth and normal in contour. There is no visible pancreatic duct dilation. There is no evidence of active peripancreatic inflammation.

**AGE**

5 Years

***Free Abdomen***

There is no evidence of peritoneal effusion. There is no apparent lymphadenopathy.

**WEIGHT**

11.53 Pounds

**ULTRASONOGRAPHIC FINDINGS**

**INTERPRETED BY**

Beth Johnson, DVM  
DACVIM

- Thick muscularis – This finding has been reported in cats with infiltrative bowel disease including both benign inflammatory disease as well as infiltrative neoplasia such as lymphoma.

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

Given this patient's young age and mild level of ALT increase, top differential is chronic antigenic stimulation from a source likely outside of primary liver insult, such as chronic gastrointestinal disease. Therefore, given the mildly increased muscularis in these images, beginning a gastrointestinal workup with a TLI, PLI, folate and cobalamin to Texas A&M GI laboratory as well as a fecal PCR enteropathogen panel to Texas A&M GI laboratory are recommended.

Empirical deworming is recommended to be repeated, given the improvement in values after last year's deworming, especially if this patient is not on routine heartworm prevention.

Chronic dental disease can result in mild increases in ALT. Therefore, evaluation of dental health, followed potentially by a course of empirical antibiotics, could also be considered.

There is no evidence of portosystemic shunt based on these images. However, if the aforementioned recommendations don't result in improvement, bile acids could be considered to assess liver function, and if the ALT remains persistently increased and/or if it progresses, ultimately a liver biopsy could be considered.

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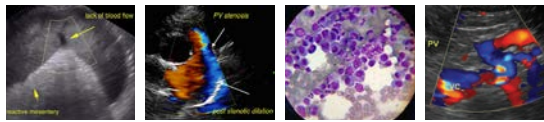
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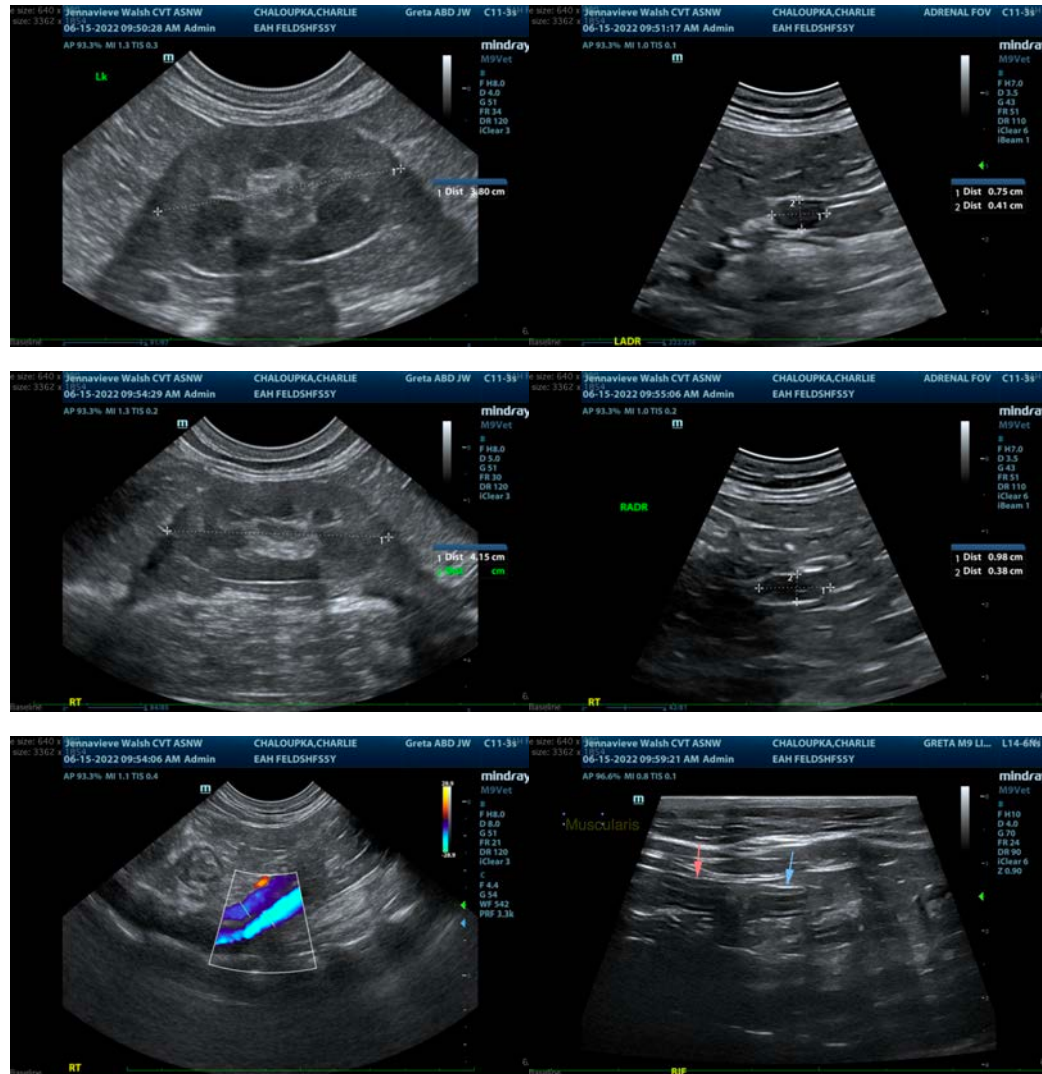
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

**Beth Johnson, DVM, DACVIM**  
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