



**PATIENT PRESENTING CLINICAL SIGNS**

Bella Nacht Elevated GGT and ALT  
Abnormal PE/Chem/CBC/UA Results: ALT 174, BUN/CREA 57, GGT 8, Lymph 0.66, PLT 84, MCV 54.6, MCH 17.7, PCT 0.14%

**SPECIES ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

Feline

**Urinary System**

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.

**BREED**

DSH

The left kidney is normal in size (4.55 cm) and shape with smooth peripheral margination. A normal 1:3 cortex to medulla ratio is maintained. The medulla and cortices are uniform in texture with some mild increased echogenicity and mild loss of corticomedullary distinction. There is no evidence of pyelectasia, mineral (unless described separately) or infarcts observed.

**SEX**

Spayed Female

The right kidney is normal in size (4.46 cm) and shape with smooth peripheral margination. A normal 1:3 cortex to medulla ratio is maintained. The medulla and cortices are uniform in texture with some mild increased echogenicity and mild loss of corticomedullary distinction. There is no evidence of pyelectasia, mineral (unless described separately) or infarcts observed.

**AGE**

12 Years

**Adrenal Glands**

Right adrenal gland is normal in size (1.38 cm long x 0.5 cm thick), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

**WEIGHT**

22.3 Pounds

Left adrenal gland is normal in size (1.46 cm long x 0.42 cm thick), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

**INTERPRETED BY**

Beth Johnson, DVM  
DACVIM

**Spleen**

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.

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**Liver**

Liver is subjectively enlarged. Margins are smooth but round. It has a normal homogenous echotexture. Parenchyma is diffusely hyperechoic characterized by less prominent than normal portal vein walls and increased echogenicity relative to the spleen. No focal lesions are observed. Visible vasculature and biliary tree appear normal without distension or congestion.

**REFERRING VET**

Dr. Vogler

The gallbladder is mildly distended with anechoic bile and gravity dependent echogenic sediment. The wall is smooth without visible thickening. There is no evidence of common bile duct dilation. There is no evidence of effusion or inflammation.

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33997

**Gastrointestinal**

The stomach wall is normal in thickness (canine < 0.5 cm and feline < 0.4 cm) and layering. The lumen of the stomach is mildly distended with echogenic non-shadowing luminal contents and gas consistent with normal ingesta. There is no evidence of obstruction, foreign material or infiltrative disease. Pyloric outflow tract appears patent.

**DATE**

1/5/22



**PATIENT**

Bella Nacht

The visible small intestines are normal in wall thickness and layering (canine duodenum < 0.5 cm and feline duodenum < 0.4 cm; other < 0.3 cm). Small intestinal motility appears adequate (1-3 contractions per min). The lumen of the small intestine is mildly distended with echogenic non-shadowing luminal contents and gas consistent with normal ingesta. There is no evidence of obstruction, foreign material or infiltrative disease.

**SPECIES**

Feline

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

**BREED**

**Pancreas**

DSH

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.

**SEX**

**Free Abdomen**

Spayed Female

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

**ULTRASONOGRAPHIC FINDINGS**

**AGE**

12 Years

- Hyperechoic hepatomegaly – consistent with benign hepatic lipidosis. Infiltrative disease such as amyloidosis or neoplasia, such as mast cell tumor or less likely, lymphoma, is also possible.
- Age related kidney change – This finding is expected/consistent with age-related mild degenerative disease and should be interpreted clinically in combination with laboratory changes.

**WEIGHT**

22.3 Pounds

- Gallbladder sand/debris of unknown clinical significance – This can be seen with biliary stasis from fasting or illness. However, in cats it is often associated with hepatobiliary disease, and should be interpreted with clinical signs such as nausea, inappetence, cranial abdominal discomfort, and/or the reported laboratory changes of increased GGT and ALT.

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DACVIM

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

If this patient is having concurrent gastrointestinal signs such as inappetence or vomiting, recommendations include a gastrointestinal malabsorption panel including TLI, PLI, folate and cobalamin, as gastrointestinal disease/chronic pancreatitis are often associated with cholangiohepatitis. A T4 and free T4 are also recommended, as hyperthyroidism can result in a mild increase in ALT as is reported in this patient.

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Other recommendations include a fine needle aspirate of the liver is patient's coagulation status is appropriate. Empirical therapy for possible cholangitis with broad-spectrum antibiotic and Ursodiol followed by monitoring of lab values and/or ultrasound changes is warranted given this patient's laboratory changes and ultrasound findings. If there is improvement, recommendations include continued medical management for at least two weeks beyond complete normalization of lab values.

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Bella Nacht

**SPECIES**

Feline

**BREED**

DSH

**SEX**

Spayed Female

**AGE**

12 Years

**WEIGHT**

22.3 Pounds

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**HOSPITAL NAME**

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**REFERRING VET**

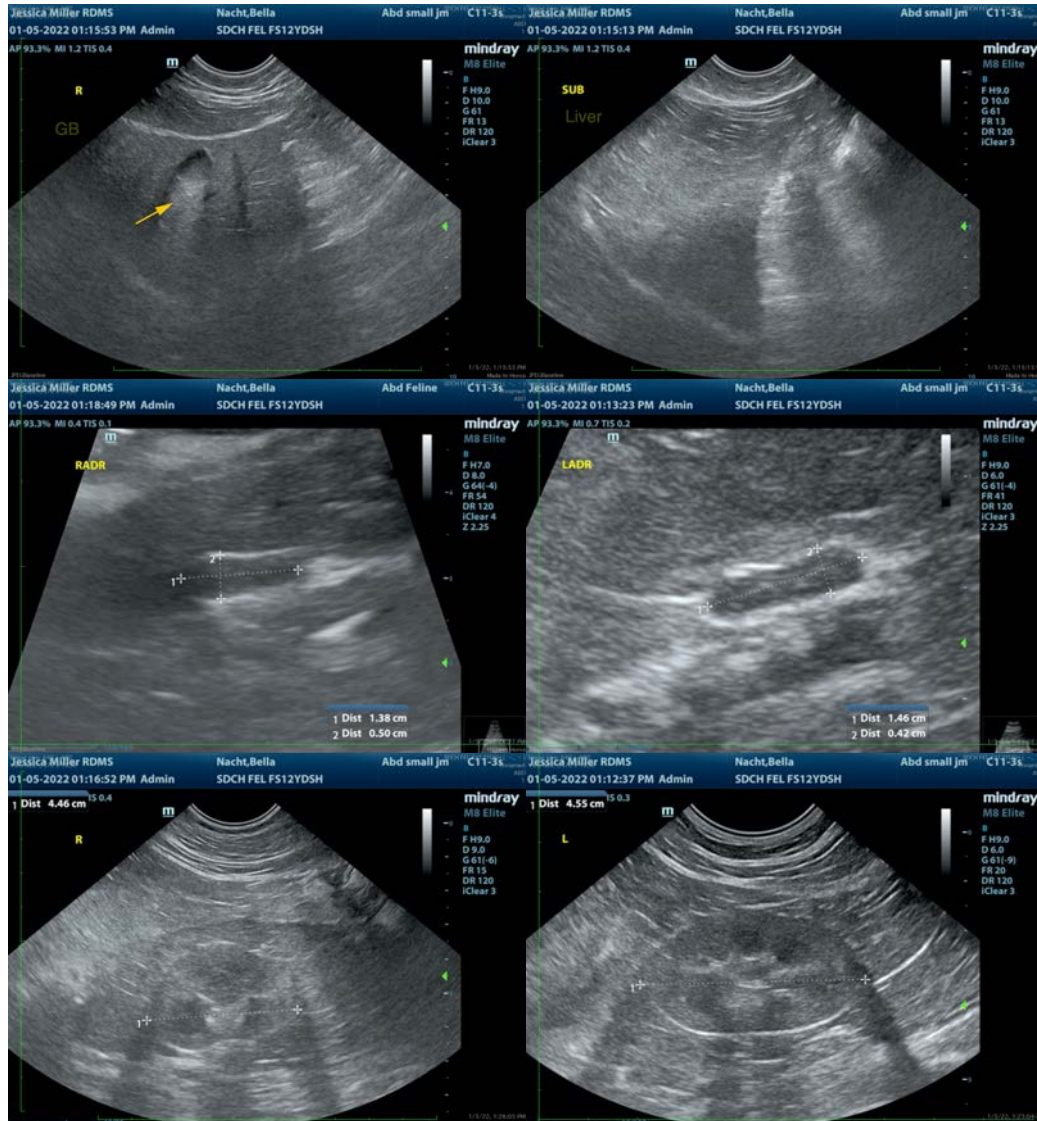
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

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