

**PATIENT PRESENTING CLINICAL SIGNS**

**Hannibal Peterson** Had weight loss, tooth resorption and anorexia 10/21/22. Performed BW that showed mild increase in ALT (200) and bili (1.4). Placed on denamarin and ursodiol and repeated BW one month later. ALT went to 411 and bili remained the same Physical exam findings: weight loss, tooth resorption and anorexia Abnormal CBC values: WNL Abnormal Chemistry Values: ALT 411, t bili 1.6 Abnormal UA Values: urine pH increased @ 8.0; 2+ proteinuria noted; 1+ bilirubinuria noted Reason for Ultrasound: ALT increase and would like to perform dental

**SPECIES**

Feline

**BREED ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

DLH

**Urinary System**

Urinary bladder is adequately distended. It has a normal uniform wall thickness. Contents include primarily anechoic fluid with occasional echogenic non-shadowing debris, most consistent with incidental suspended lipid in a cat, possibly combined with exfoliated cells, mucous and/or small blood clots. Both sterile inflammation as well as urinary tract infection can also present with echogenic debris. No masses or cystoliths are observed. The trigone and visible pelvic urethra are normal in thickness with a smooth mucosal surface.

**SEX**

Neutered Male

**AGE**

9 Years

The right kidney is normal in size (3.77 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.

**WEIGHT**

10.4 Pounds

The left kidney is normal in size (3.97 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.

**INTERPRETED BY**

Beth Johnson, DVM  
DACVIM

**Adrenal Glands**

The right adrenal gland is normal in size (0.44 cm), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

**IMAGING BY**

Loetitia Saint-Jacques,  
LVT

The left adrenal gland is normal in size (0.39 cm), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

**HOSPITAL NAME**

Brighton Greens VH

**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.

**REFERRING VET**

Dr. Robin Janeway

**Liver**

Liver is subjectively enlarged (swollen contour) without disruption of architecture. 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 and falciform fat.

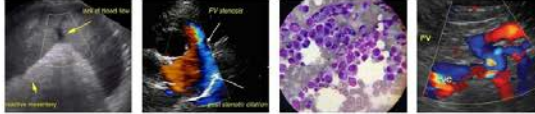
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No focal lesions are observed. Visible vasculature and biliary tree appear normal without distension or congestion.

**DATE**

12/14/22



**PATIENT**

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.

Hannibal Peterson

**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 empty with no evidence of obstruction, foreign material or infiltrative disease. Pyloric outflow tract appears patent.

**SPECIES**

Feline

**BREED**

DLH

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 empty with no evidence of obstruction, foreign material or infiltrative disease.

**SEX**

Neutered Male

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

**AGE**

9 Years

**Pancreas**

The observed pancreas appears appropriately isoechoic to surrounding omental fat. The capsule is mildly irregular in shape. Parenchyma is mildly heterogenous and coarse. There is no visible pancreatic duct dilation. There is no evidence of active peripancreatic inflammation.

**WEIGHT**

10.4 Pounds

**Free Abdomen**

There is no evidence of free peritoneal effusion noted in these images.

**INTERPRETED BY**

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DACVIM

Heterogeneous mesenteric lymphadenopathy is noted with a representative node measuring 4.0 cm long x 1.0 cm thick.

**PRIMARY FINDINGS**

- **Hyperechoic hepatomegaly** – This appearance is most consistent with benign hepatic lipidosis. Infiltrative disease such as amyloidosis or round cell neoplasia, such as mast cell tumor or less likely, lymphoma, is also possible.

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- **Heterogeneous mesenteric lymphadenopathy** - Differentials include both reactive lymphadenopathy as well as infiltrative neoplasia and cannot be differentiated without tissue sampling.

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**SECONDARY FINDINGS**

- Urinary bladder debris

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- **Pancreatic age-related remodeling** – Mild irregularities are consistent with benign age-related change. Low-grade smoldering chronic pancreatitis cannot be ruled out and should be suspected in the face of appropriate clinical signs.

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**PATIENT INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

**Hannibal Peterson** Given this patient's reported dental disease and anorexia, the progressively increasing ALT could be secondary to hepatic lipidosis. However, infiltrative disease cannot be ruled out. Therefore, recommendations include a fine needle aspirate of both the liver and the mesenteric lymph nodes, if possible, and if patient's coagulation status is appropriate.

**SPECIES**

**Feline** A gastrointestinal malabsorption panel (including cobalamin, folate, TLI and PLI) to Texas A&M GI Laboratory is recommended for further evaluation of GI and pancreatic function.

**BREED**

**DLH** In the meantime, in addition to management of the dental disease with antibiotics, pain management, etc., aggressive nutritional support is recommended in the form of an appetite stimulant if successful, or ideally feeding tube placement to help regulate calories and determine the effects of anorexia on the ALT.

**SEX**

Neutered Male

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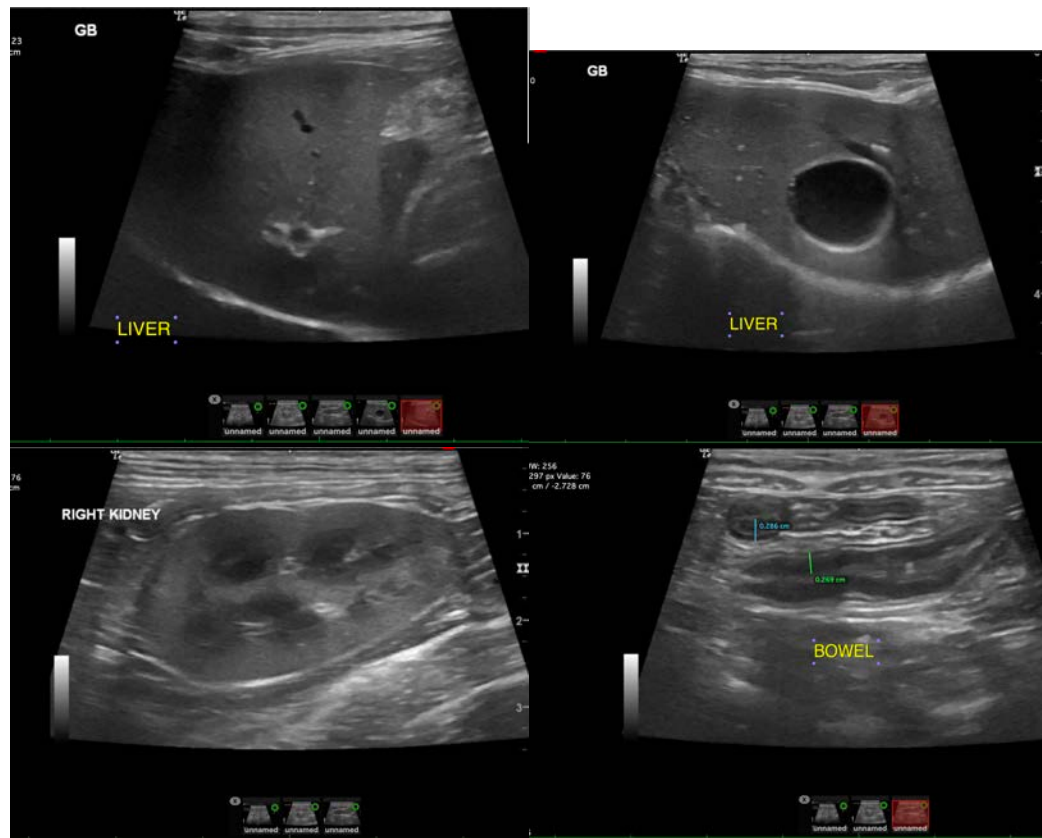
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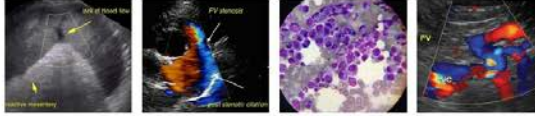
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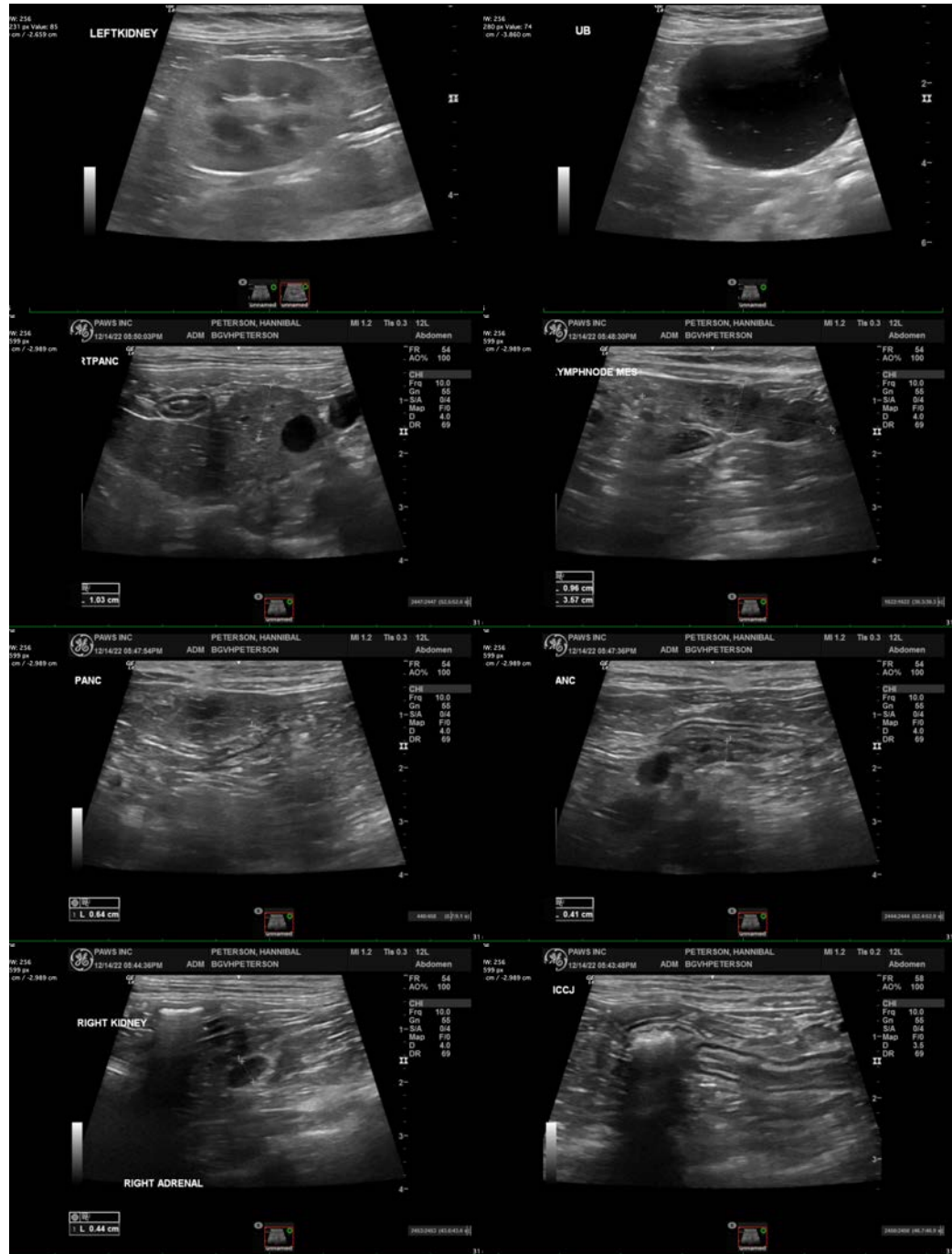
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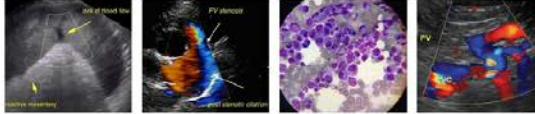
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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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