



**PATIENT PRESENTING CLINICAL SIGNS**

**PATIENT** Bitsy Traynor  
**SPECIES** Canine  
**BREED** Wheaton Terrier  
**SEX** Spayed Female  
**AGE** 12/15/11  
**WEIGHT** 39.5 kg

Presented for annual exam, vaccines and senior lab work. Owner had no health concerns. Annual senior labs performed 6/19/23 showed an elevated ALT, SDMA and PSL and proteinuria. We planned to recheck labs in 1 month to see if changes were chronic. Labs repeated 7/24/23 showed chronically elevated ALT, normal SDMA and PSL, chronic proteinuria. Owner was given option to start Benazepril, fish oil and Denamarin or perform AUS for further evaluation. O declined medications and elected AUS. Working diagnosis Hepatitis, pancreatitis, other MEDS Simparica Trio q30d

Abnormal PE/Chem/CBC/UA Results: 7/24/23: Adult Wellness (Chem, CBC, UA) ALT 290 (12-118) MONO 1157 (0-840) UA: USG 1.037, 3+ protein UPC 1 (<0.5) 6/19/23: KA705 (Chem, CBC, UA, Accuplex, Fecal) CHEM - ALT 238 (12-118) - SDMA 17.6 (<14) - PSL 527 (24-140) CBC - MONO 847 (0-840) T4 - 1.6 (N) UA - USG 1.045, 3+ protein UPC - 0.8 (<0.5)

**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 (6.89 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 (6.82 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 (1.0 cm at the cranial pole and 0.73 cm at the caudal pole), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

The left adrenal gland is normal in size (0.62 cm at the cranial pole and 0.67 cm at the caudal pole), 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). A 1.1 cm x 1.5 cm non-capsule disrupting hypo- to anechoic nodule is noted near the head of the spleen. Splenic vasculature appears normal.

**Liver**

Liver is subjectively enlarged with mildly irregular margins. Parenchyma is markedly heterogenous, almost nodular, characterized by multiple poorly defined hypoechoic nodules within otherwise hyperechoic liver parenchyma. Visible vasculature and biliary tree appear normal without distension or congestion.

**INTERPRETED BY**

Beth Johnson, DVM  
DACVIM

**IMAGING PERFORMED BY**

Loetitia Saint-Jacques,  
LVT

**HOSPITAL NAME**

Truckee Meadows VH

**REFERRING VET**

Dr. Rachel Kuester

**INVOICE**

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**DATE**

8/2/23



**PATIENT**

Bitsy Traynor

Gallbladder is moderately distended with anechoic bile as well as suspended and gravity dependent echogenic debris. The wall is smooth without visible thickening. There is no evidence of cystic or CBD dilation. There is no evidence of effusion or inflammation.

**SPECIES**

Canine

***Gastrointestinal***

**BREED**

Wheaton Terrier

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 fluid, as well as echogenic nonshadowing luminal contents and gas consistent with normal ingesta/chyme. There is no evidence of obstruction, foreign material or infiltrative disease. Pyloric outflow tract appears patent.

**SEX**

Spayed Female

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.

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

***Pancreas***

**WEIGHT**

39.5 kg

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.

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***Free Abdomen***

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

There is no apparent lymphadenopathy noted in these images.

There is no evidence of heart base or pericardial pathology noted in these images at this time. If cardiac function evaluation is desired a full echocardiogram is recommended.

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**ULTRASONOGRAPHIC FINDINGS**

**HOSPITAL NAME**

Truckee Meadows VH

- **Markedly heterogenous Liver** – These changes are most consistent with benign processes such as nodular hyperplasia, steroid (vacuolar) hepatopathy, extramedullary hematopoiesis or possibly chronic inflammatory disease and less commonly infiltrative round cell or metastatic neoplasia.
- **Mild gallbladder debris** - Cholecystic debris is of unknown clinical significance. It can be seen with biliary stasis from fasting or illness. Cholecystic debris is not necessarily related to hepatobiliary disease. Echogenic bile is most commonly an incidental finding in dogs and should be interpreted in combination with clinical signs such as nausea, inappetence, cranial abdominal discomfort and/or laboratory changes such as increased ALP and/or increased Tbili.

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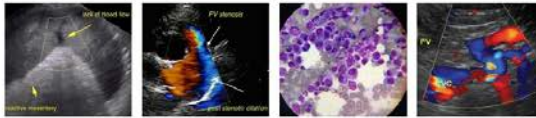
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- **Hypo to anechoic splenic nodule** – likely represents a benign lesion such as a cyst, hematoma, nodular hyperplasia, extramedullary hematopoiesis, etc., however while considered less likely, infiltrative neoplasia can mimic benign lesions, and cannot be ruled out.

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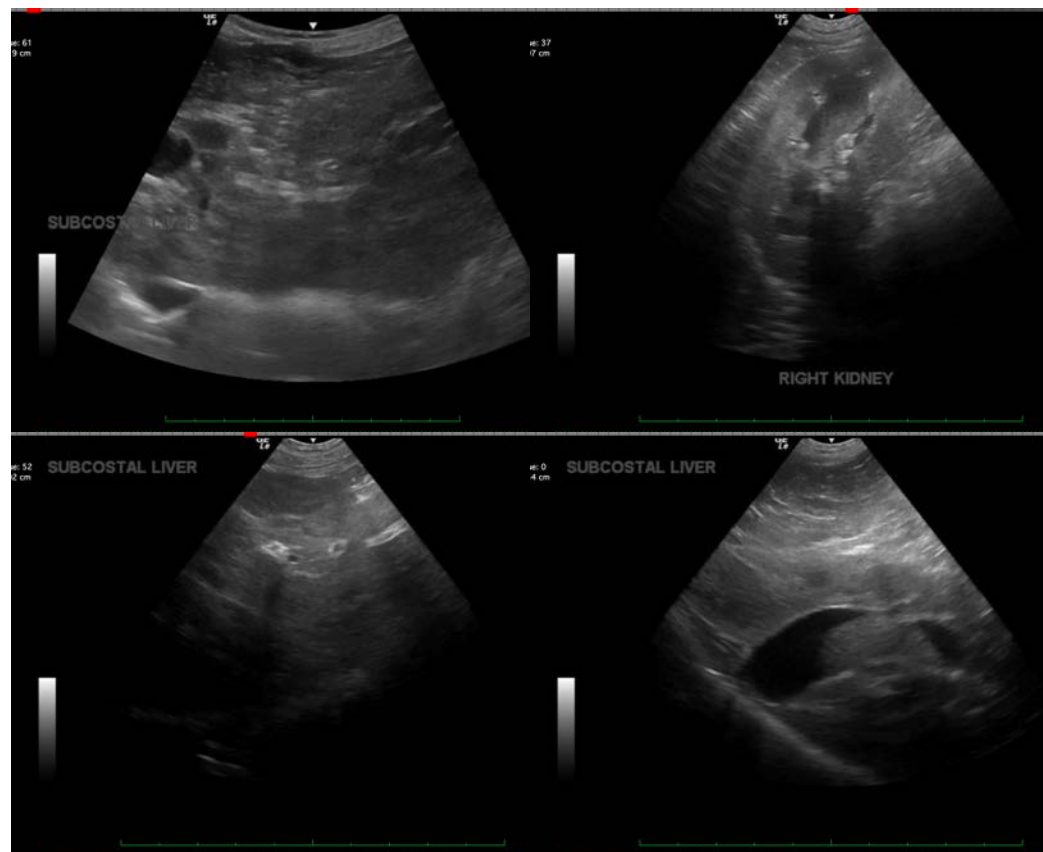
**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

Given this patient's mild proteinuria, if not recently evaluated, a blood pressure is recommended.

Testing for Leptospirosis is recommended.

If patient's coagulation status is appropriate, a fine needle aspirate of the liver could be considered to assess inflammatory cell type, rule in/out round cell neoplasia, etc.

Close monitoring of the UPC should be done, and if UPC further increases, and despite underlying cause, therapy for PLN should be considered in the form of ACE inhibitors, fatty acids, antithrombotics such as low-dose aspirin or Plavix if patient's coagulation status is appropriate, +/- a renal diet.





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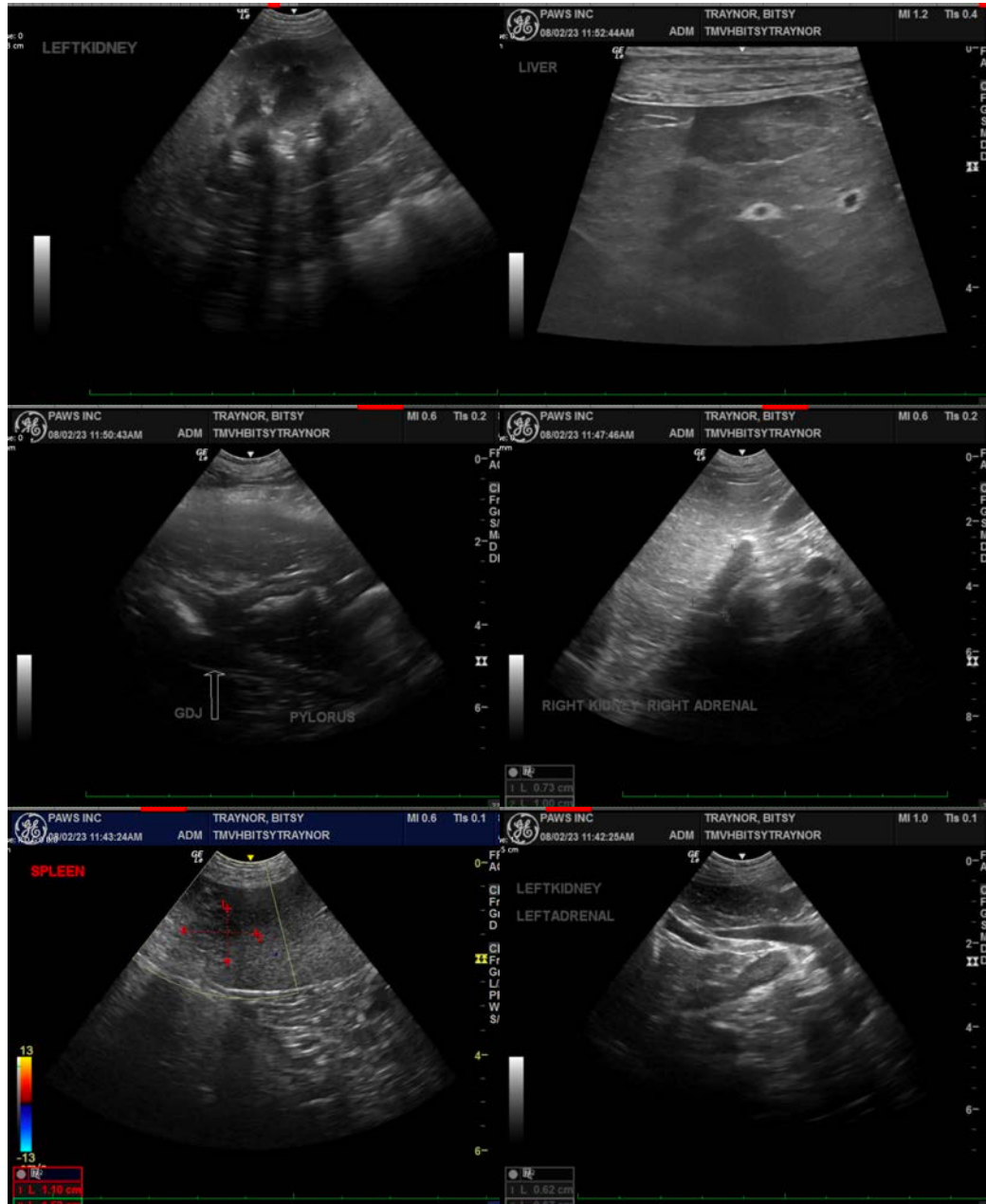
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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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