



## PATIENT

Lola Cardona

## SPECIES

Canine

## BREED

West Highland Terrier

## SEX

FS

## AGE

10 years

## WEIGHT

26 lbs

## INTERPRETED BY

Beth Johnson, DVM  
DACVIM

## IMAGING PERFORMED BY

Dr. Gabriel Ferrer

## HOSPITAL NAME

Pulse Pet Ultrasound  
Services

## REFERRING VET

Dr. Francisco  
Monserate

## INVOICE

11748

## DATE

4/21/2026

## PRESENTING CLINICAL SIGNS

Px presented as a referral for an abdominal ultrasound due to Hx of Addison's and liver disease. Px originally visited rDVM due to bloody stool and inappetence. Px presented with bloody diarrhea, inappetence, and lethargy. Px had gotten an abdominal ultrasound and an FNA done approximately a year ago and the results point to liver disease, but recent bloodwork shows a significant elevation in the hepatic enzyme values. Sample of liver via FNA was obtained and results are currently pending.

Current Mx: Prednisolone, denamarin, Kaolin pectin, Carafate, and Famotidine.

Abnormal PE/Chem/CBC/UA Results: Bloodwork, last abdominal ultrasound and Cytology reports attached below for your reference.

## ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

### Urinary System

Urinary bladder is adequately distended with primarily anechoic contents and occasional echogenic non-shadowing debris. Apical urinary bladder wall is diffusely thick (0.41 cm). Mucosa is hyperechoic and irregular. No masses are observed. There are multiple, too numerous to count, shadowing mineral densities/cystoliths all measuring under or right at up to 0.4 cm in diameter. The trigone and visible pelvic urethra are normal thickness with a smooth mucosal surface.

The right kidney is normal is size (5.23 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 is size (5.48 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

Adrenal glands are small (flattened contour). Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal. Left adrenal measures 0.27 cm at the cranial pole and 0.19 cm at the caudal pole. The right adrenal measures 0.31 cm at the cranial pole and 0.34 cm at the caudal pole.

### 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). Multifocal well-demarcated hyperechoic homogenous nodules are noted. Splenic vasculature appears normal.

### Liver

Liver is normal to subjectively small in size with slightly undulating or scalloped capsular contour or margins. Parenchyma is diffusely heterogenous with increased portal markings and coarse architecture. No focal nodules or masses are observed. Visible vasculature and biliary tree appear normal without distension or congestion.



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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.

### Gastrointestinal

The visible stomach wall is normal in thickness and layering. The lumen of the stomach is empty with no evidence of obstruction, foreign material or infiltrative disease. Pyloric outflow tract appears patent.

The small intestines are diffusely mildly thick with the jejunum measuring 0.43 cm thick and the duodenum measuring 0.58 cm thick with normal intact layering. The lumen is diffusely empty with no evidence of obstruction, foreign material or infiltrative disease.

The colon, similarly, is mildly thick ranging between 0.24 cm and 0.38 cm thick with normal intact layering and the lumen is empty.

### Pancreas

The pancreas that is observed appears appropriately isoechoic to surrounding omental fat. Visible capsule is smooth and normal in contour. Visible pancreatic parenchyma is homogenous and unremarkable. There is no visible pancreatic duct dilation. There is no evidence of active peripancreatic inflammation.

### Free Abdomen

There is a trace amount of anechoic free fluid noted in these images.

Medial iliac lymph nodes are prominent in size with swollen capsular contour. Normal elongated shape (length to width ratio) is maintained. There is no loss of parenchymal detail.

### PRIMARY FINDINGS

- An obvious cause for the marked liver changes is not identified in these images. Microscopic disease such as Leptospirosis, bacterial cholangiohepatitis, chronic active hepatitis, copper-associated hepatotoxicity, other hepatotoxicity, other reactive hepatopathy, infiltrative neoplasia, etc. cannot be definitively ruled out.
- Diffusely mildly thick small and large bowel. Trends in appearance toward a benign infectious, parasitic, dietary related, other, inflammatory bowel disease with infiltrative neoplasia being possible but considered much less likely.
- The flat adrenal glands are consistent with patient's reportedly previously diagnosed hypoadrenocorticism.
- Trace free fluid is of unknown origin. Differentials (unless already ruled out) could include increased hydrostatic pressure (cardiac disease and/or vascular or lymph blockage), decreased oncotic pressure (low albumin), vasculitis, paraneoplastic fluid, rupture/leakage of/from an organ (GI, GB, UB, other), blood (hemoabdomen), other.

### SECONDARY FINDINGS

- Numerous small urinary bladder cystoliths.



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- Hyperechoic splenic nodules – most consistent with benign myelolipomas. Other differentials such as fibrosis or calcification caused by old hematomas or infarcts, chronic inflammation, granulomatous disease or metastatic disease cannot be ruled out, but are considered less likely.
- Moderately reactive medial iliac lymph nodes – infiltrative neoplastic disease cannot be ruled out but is considered less likely.

## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

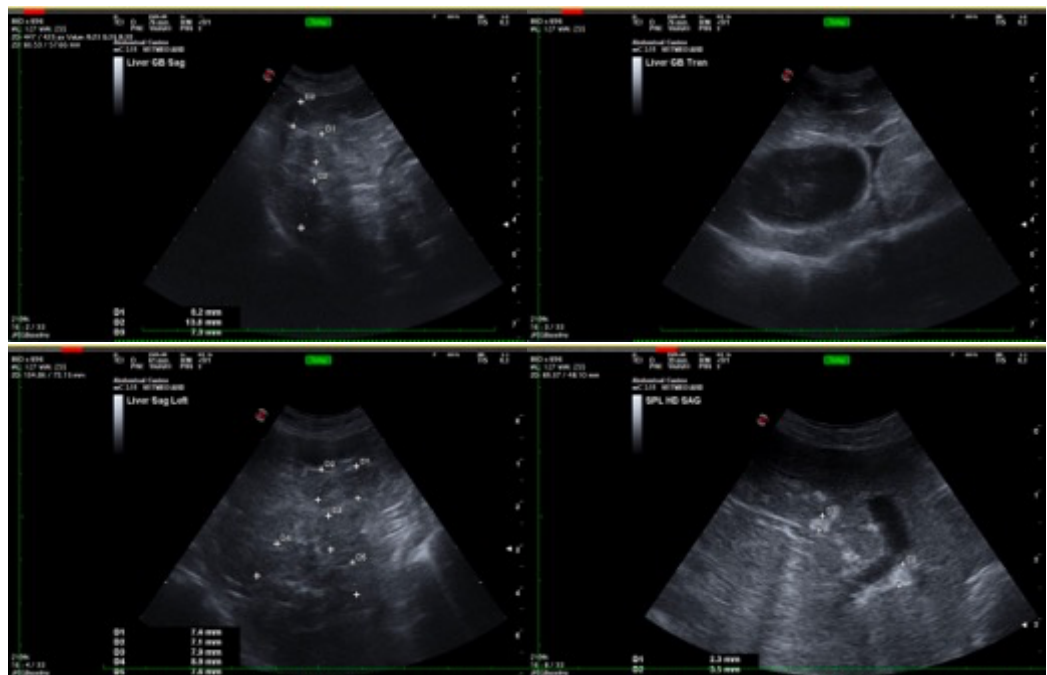
Given patient's history combined with the appearance of the liver, ultimately, a liver biopsy being sure to include copper level assessment is recommended after fully assessing patient's coagulation status.

In the meantime, given the ongoing gastrointestinal signs, a routine fecal/giardia exam is recommended if not recently evaluated.

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.

A fecal enteropathogen PCR panel to Texas A&M GI Laboratory could be considered for further evaluation of possible infectious disease. Contact lab for recommendations on how long to discontinue antibiotics (if indicated) prior to obtaining a stool sample for submission.

While continuing workup, supportive/symptomatic medical management of clinical signs is recommended, including a probiotic (such as visbiome or proviable), empirical deworming with a 5-day course of Panacur and, if tolerated, a transition in diet, based on trial-and-error response, beginning possibly with a gastrointestinal biome diet vs a hydrolyzed protein diet vs other. Some patients respond to one brand/version of a hydrolyzed protein diet better than another brand, so several brand attempts may be required.





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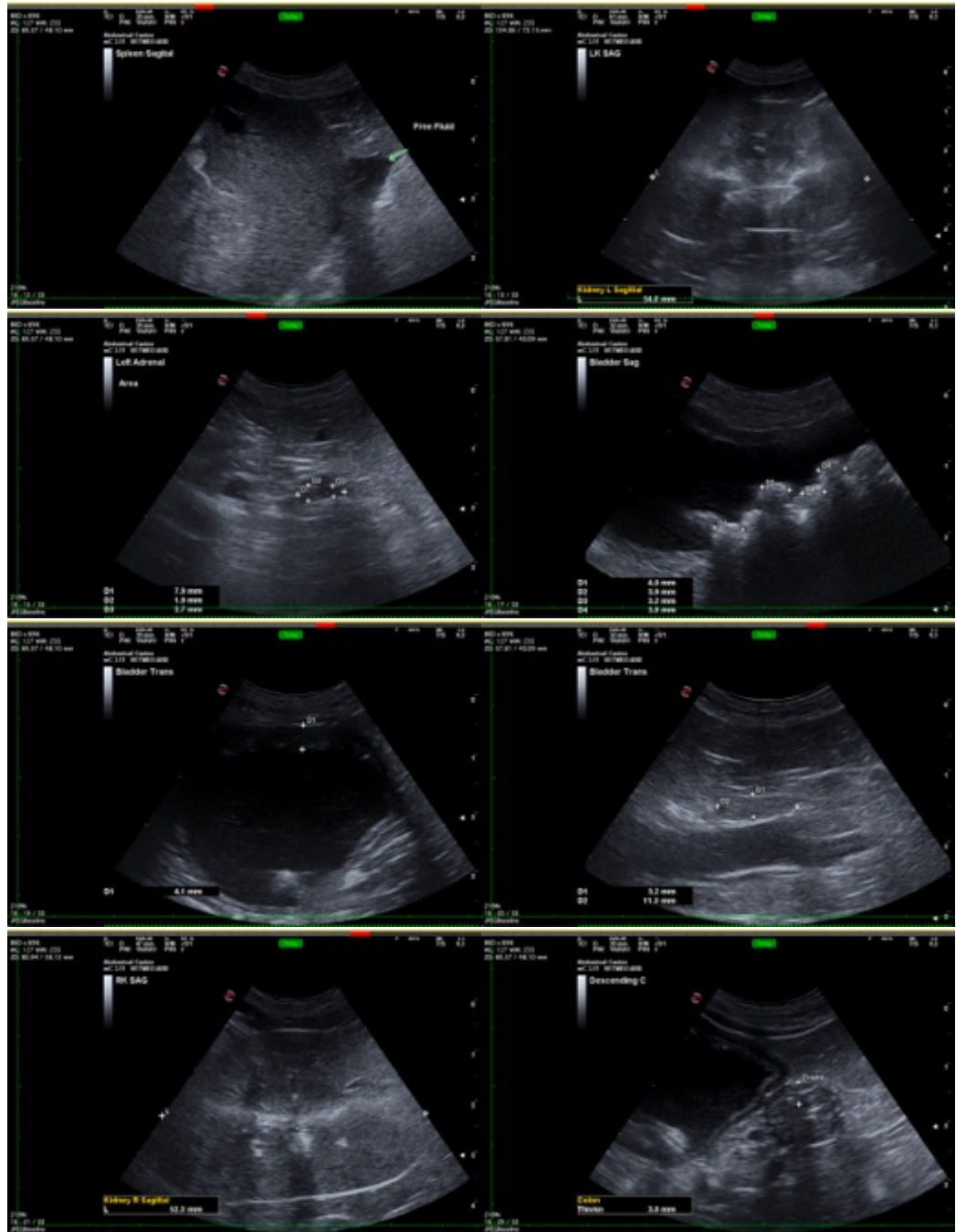
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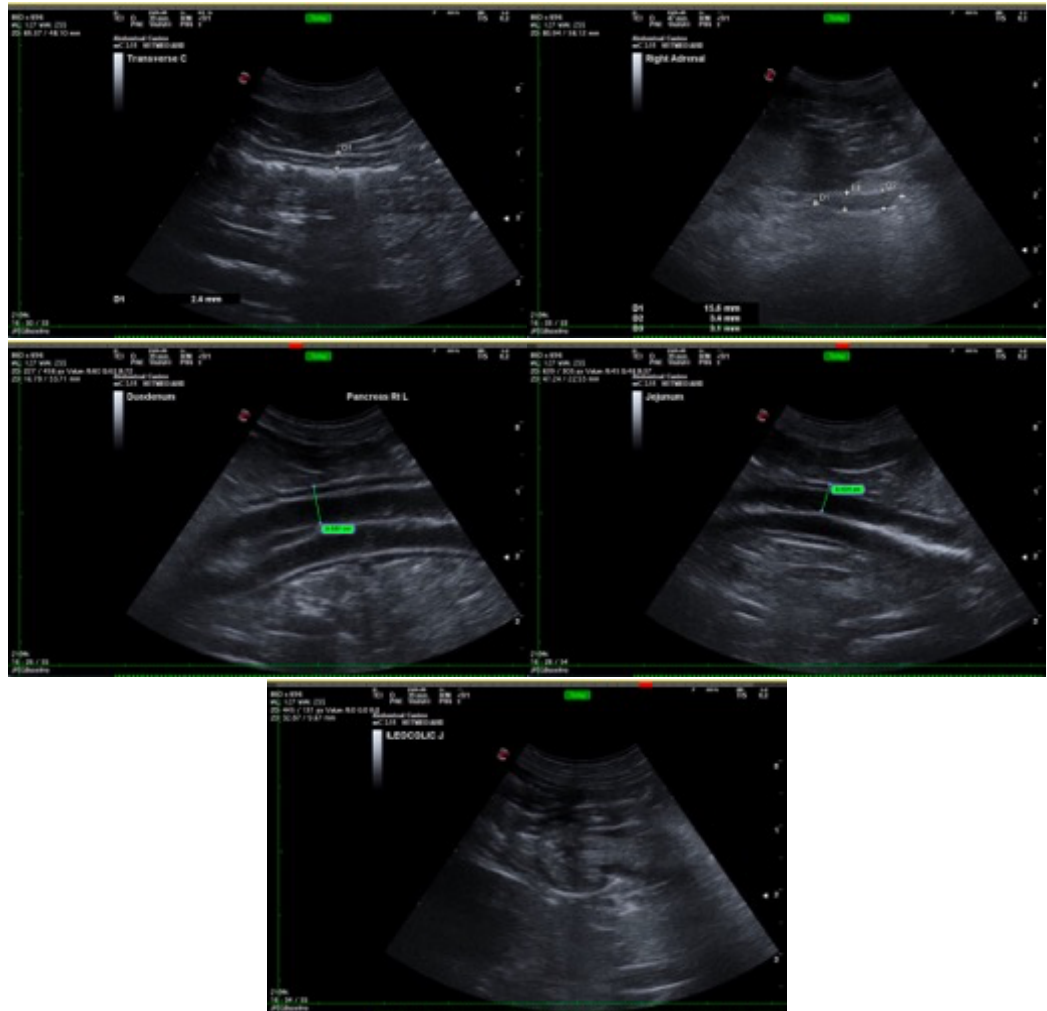
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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  
info@sonopath.com