



## PATIENT

Daisy Shew

## SPECIES

Canine

## BREED

Chihuahua Maltese  
Mix

## SEX

FS

## AGE

5 years

## WEIGHT

18.4 lbs

## INTERPRETED BY

Beth Johnson, DVM  
DACVIM

## IMAGING PERFORMED BY

Dr. Saum Hadi

## HOSPITAL NAME

Nimbus Pet Hospital

## REFERRING VET

Dr. Saum Hadi

## INVOICE

11288

## DATE

2/11/2026

## PRESENTING CLINICAL SIGNS

- P presents for PU/PD, polyphagia, hyposthenuria, and to evaluate increased ALKP. Normal LDDS.
- Hx of struvite calculi, dissolved with urinary diet, which P is currently on. No weight gain, O is strict with caloric intake, but O notes P's food drive has increased significantly to where P is ravenous.
- Last year, P's ALKP was normal. When we were dissolving the struvite stone, we performed a few UAs, and P would always be isosthenuric with normal renal values, but that has recently turned to hyposthenuria, correlating with O noticing an increase in water intake.

Abnormal PE/Chem/CBC/UA Results: Mild thrombocytosis (483 K/uL) - Mild ALKP increase (317 U/L) - USG: 1.007 (pH 5, otherwise normal) - Normal LDDS (resting cortisol: 4.1 ug/dL, 4 and 8 hour post <0.2 ug/dL) - NSF on rest of IDEXX senior panel (SDMA 10 ug/dL, creatinine 0.6 mg/dL, BUN 8 mg/dL).

## ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

### Urinary System

The urinary bladder is adequately 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 is size (4.1 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. A hyperechoic band parallel to the corticomedullary border is present. There is no evidence of pyelectasia, mineral or infarcts observed.

The left kidney is normal is size (3.9 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. A hyperechoic band parallel to the corticomedullary border is present. 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 0.37 cm at the cranial pole and 0.36 cm at the caudal pole. The right adrenal measures 0.44 cm at the caudal pole but the right adrenal gland is difficult to fully visualize, and what I think is the caudal pole is measured subjectively flat at 0.44 cm.

### 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



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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.

### *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 visible small intestines are normal in wall thickness and layering. 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.

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

### *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.

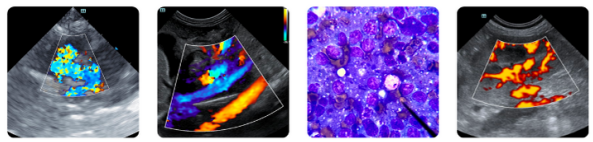
### *Free Abdomen*

There is no visible free peritoneal effusion 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.

## ULTRASONOGRAPHIC FINDINGS

- Subjectively mildly flat adrenal glands – This can be a normal patient variant and/or a sign of exogenous cortisol administration. If exogenous steroids are not being administered, hypoadrenocorticism (either relative or absolute) should be considered.
- Pancreatic age-related remodeling/Chronic pancreatitis – 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.
- Very mildly reactive lymph nodes – infiltrative neoplastic disease cannot be ruled out but is considered less likely. This finding may be in part normal patient variant.
- Bilateral medullary rim sign - This finding is of unknown clinical significance and can be a normal variant, often idiopathic. Medullary rim sign can be present with renal disease including lymphoma, hypercalcemic nephropathy, Leptospirosis, tubular disease, other and should be interpreted in combination with other more specific indications of kidney disease such as isosthenuria, proteinuria, azotemia, etc. This is a common incidental finding in patients with diabetes mellitus.



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## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

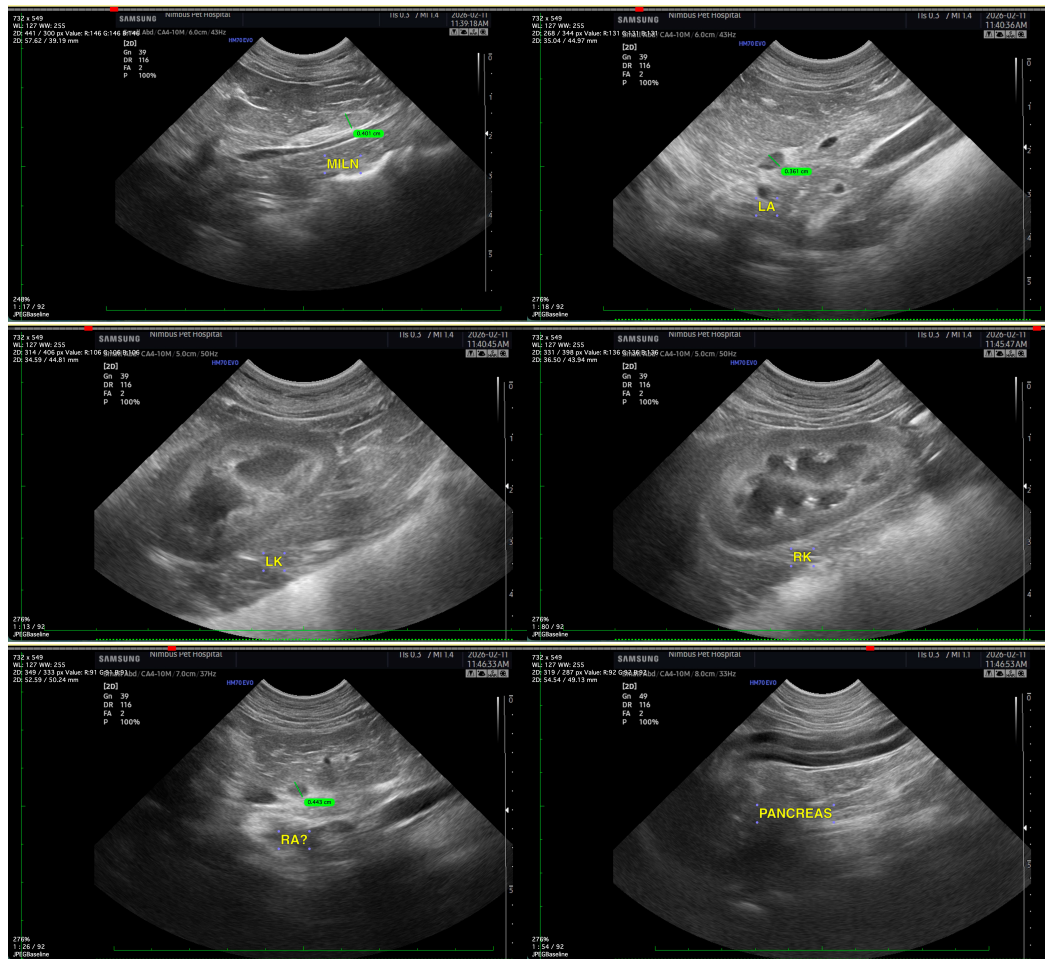
Given patient's reported polyphagia in the face of reportedly normal daily caloric intake, combined with the subtle pancreatic changes, a gastrointestinal malabsorption panel (including cobalamin, folate, TLI and PLI) to Texas A&M GI Laboratory is recommended for further evaluation of GI and pancreatic function.

Given patient's subtle bilateral medullary rim sign, monitoring/recheck of patient's blood glucose +/- fructosamine level, could be considered.

Comprehensive infectious disease evaluation could be considered i.e. testing for leptospirosis.

Bile acids could be considered if patient's total bilirubin is not increased.

Ultimately, however, this is in my opinion, an odd presentation in lieu of the reported results and patient age, etc. and if a diagnosis is not obtained, and clinical signs persist, a full consultation with an/or referral to a veterinary internist may be helpful.



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



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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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