



PATIENT

Astro Crum

SPECIES

Feline

BREED

DSH

SEX

MN

AGE

11 years 4 months

WEIGHT

10.6 lbs

INTERPRETED BY

Beth Johnson, DVM
DACVIM

IMAGING PERFORMED BY

Dr. Lucas Budden

HOSPITAL NAME

Frontier Veterinary
Hospital

REFERRING VET

Dr. Lucas Budden

INVOICE

11134

DATE

1/15/2026

PRESENTING CLINICAL SIGNS

Clinical signs: Hypercalcemia History: Lab work 11/12/25 showed elevated calcium. Ionized high. Ultrasound to look for underlying cause. History of chronic/recurrent vomiting and diarrhea.

Maintaining a stable weight currently. Current medications: gabapentin and Butorphanol to facilitate ultrasound.

Abnormal PE/Chem/CBC/UA Results: Physical exam: BCS 5/9, peripheral LNs palpate small/normal in size, severe dental calculus and multiple FORLs noted, no thyroid slip, normal exam otherwise Lab work: 11/12/25 cbc/chem ALT high 109 Calcium high 12.1 Remainder of CBC/Chem normal 12/1/25 PTH/ionized calcium/T4 PTH low <0.5 Ionized calcium high 1.63 T4 normal 1.7 Chest rads report pending but no obvious pulmonary masses or sternal lymphadenopathy.

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 (4.03 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 (3.88 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 (0.26 cm at cranial pole and 0.23 cm at caudal pole), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

The left adrenal gland is normal in size (0.35 cm at cranial pole and 0.3 cm at caudal pole), shape and overall architecture, echogenicity and echotexture. 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). 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 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



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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.

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The visible small intestine demonstrates areas of moderately thick muscularis layer relative to mucosa (disruption of the normal 1:3 muscularis:mucosa ratio). Small intestinal submucosa is slightly irregular, thick and hyperechoic, without evident loss of layering appreciated. The lumen of the small intestine is empty with no evidence of obstruction or foreign material.

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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.

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Pancreas

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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.

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Free Abdomen

There is no visible free peritoneal effusion noted in these images.

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Mesenteric and 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.

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ULTRASONOGRAPHIC FINDINGS

- Moderate inflammatory bowel disease (IBD) pattern – Thick muscularis has been reported with infiltrative bowel disease including both benign inflammatory disease as well as infiltrative neoplasia such as lymphoma. No loss of layering or distinct characteristics of malignancy are present. Therefore, differentials cannot be further ranked without tissue sampling.
- Moderately reactive medial iliac lymph nodes – infiltrative neoplastic disease cannot be ruled out but is considered less likely.
- Mildly reactive mesenteric lymph nodes – infiltrative neoplastic disease cannot be ruled out but is considered less likely.
- 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.

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INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

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If not already evaluated as part of the hypercalcemia workup, a PTHrP could be considered.

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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.

Ultimately, especially given the reported gastrointestinal signs and the bowel changes described above, tissue sampling may be indicated to rule out hypercalcemia of malignancy, in which case GI biopsies being sure to include ileum, if possible, could be considered.



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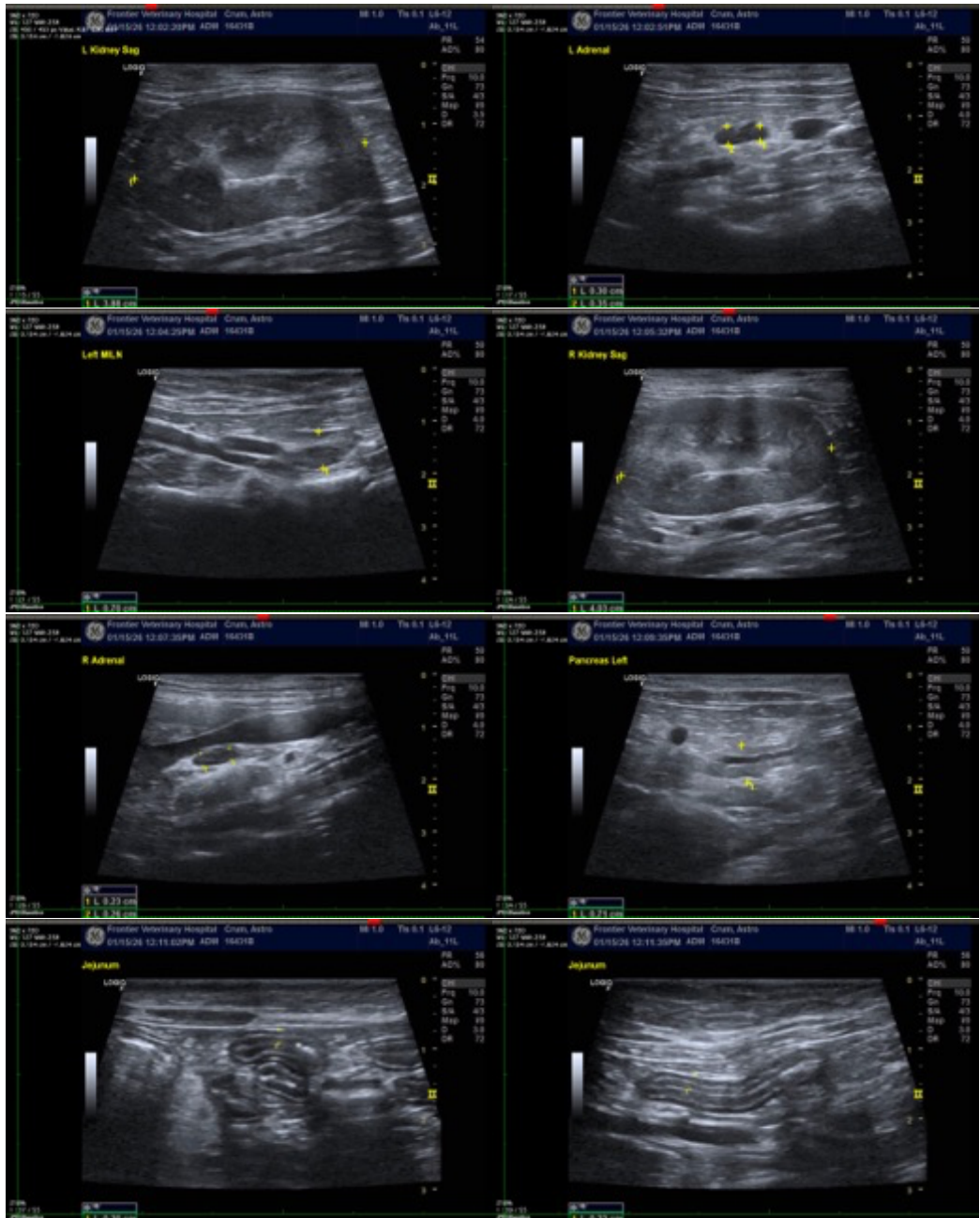
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Other than supportive/symptomatic medical management of clinical signs, further diagnostic and treatment recommendations are largely dependent on results of the above.



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.



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