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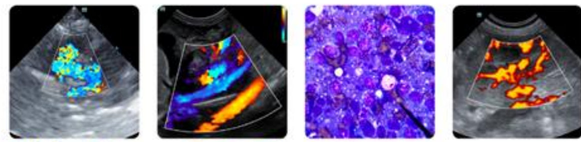


Clinical Sonography & Telecytology
Educational Teleconsultation Services™

PATIENT
Miley Arnold

SPECIES
Canine

BREED
Maltese

SEX
FS

AGE
7yr

WEIGHT
6.28kg

INTERPRETED BY
R. McKenzie Daniel, DVM, DABVP (Canine and Feline)

IMAGING PERFORMED BY
Renee Trionfetti, VMD

HOSPITAL NAME
Blue Pearl Wyomissing

REFERRING VET
Blue Pearl Wyomissing

INVOICE
23984

DATE
02/25/2026

4pawsPRESENTING CLINICAL SIGNS

- AUS to further evaluate vomiting, hematochezia, hepatomegaly, elevated liver enzymes, elevated pancreatic lipase. Currently in the ER. When owner came home around 1 pm yesterday, there was some bloody diarrhea in home. Patient did not eat dinner last night and would only eat chicken jerky treats. Has not eaten in a few days, but not unusual for patient. Typically a picky eater. This morning around 4 am, patient started vomiting and had ~4 bouts of bloody diarrhea.
- Prior medical history: Was seen at PETS in Lancaster in August for a similar episode. Had bloodwork and x-rays. Liver was enlarged and bloodwork was all over the place per owner. Treated with fluids and probiotic and got better.
- Diet: Homecooked diet - chicken or turkey, rice, and vegetables
- Medications: None
- Abnormal PE/Chem/CBC/UA Results: CBC: HCT 52.6%, WBC 20.16k H, lymph 1.06k, mono 0.85k, neut 18.03k H, plt 503k Chem: Alb 4.1 H, ALP 291 H, ALT 83, iCa 9.4, Chol 257, Cr 0.5, GGT 16 H, Glu 144 H, Phos 4.8, tBili 0.4, TP 6.9, Glob 2.8, BUN 21.2 EPOC: bicarb 25.1, iCa 1.25, Cl 114, Glu 132 H, K 3.9, Na 150, lac 3.77 H, pH 7.313 H QPL: 794 H AXR (DACVR): Liver mildly, diffusely enlarged w/mildly rounded margins Stom contains mild amt of fluid & gas. SI contains gas & fluid, w/few loops measuring at the upper limits of normal for luminal diameter, but no overt segmental dilation Colon contains mild amt of gas Diffusely gas and fluid filled SI w/no overt radiographic evidence of mechanical obstruction. Ddx gastritis, panc, enteritis (which could be inflammatory, viral, bacterial, dietary, parasitic or toxic in origin)

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of 2 cm exhibited normal thickness and tone. Anechoic urine was present in the lumen with no evidence of urine/lumen sediment, mineral, or calculi. The ureteral papillae were normal. The ureters were not visible which is normal. No evidence of inflammatory or neoplastic changes was noted.

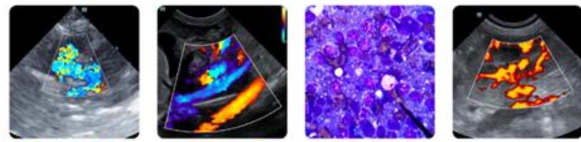
Normal size and margination were present in the kidneys. A normal 1:3 cortex / medulla ratio and normal corticomedullary definition were maintained. The echogenicity of the cortex was similar to or slightly less than normal liver parenchyma while the medulla echogenicity was hypoechoic to the cortex with no evidence of pelvic dilation. Bilateral areas of pinpoint to focal medullary mineral were present. The left kidney measured 4.1 cm in length. The right kidney measured 4.2 cm in length.

The area of the aortic trifurcation was free of pathology.

Adrenal Glands

The left adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 0.50 cm width at the caudal pole. The right adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The right adrenal gland measured 0.50 cm width at the caudal pole.

Spleen



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The spleen exhibited a finely textured and homogenous parenchyma which was hyperechoic to the liver and renal cortical parenchyma. The capsule was smooth and regular without apparent expansion. The splenic vasculature at the hilus was normal in volume with no evidence of congestion or thrombosis. Acute to chronic inflammatory, neoplastic, or benign parenchyma changes were not noted.

Liver/Gallbladder

The liver presented mildly enlarged in size. The parenchyma of the liver was subjectively normal in echogenicity compared to the spleen and renal cortices. The liver parenchyma was uniform with a mildly coarse echotexture. The capsule of the liver was symmetrically rounded to mildly swollen in margination. The hepatic and portal vasculature were normal in appearance without signs of congestion. The gallbladder was non-distended in size with primarily anechoic luminal content. The cystic and common bile ducts were normal.

Gastrointestinal

The stomach presented mild thickened wall. Intact wall layering was maintained and distinct. The gastric lumen was empty with mild gas.

The small intestine presented intact wall layering with 1:3 muscularis/mucosa ratio. The lumen of the small intestine was empty with no signs of mechanical/metabolic ileus, obstruction or foreign material. The duodenum wall measured 0.43 cm width. The jejunum wall measured 0.31 cm width. The colon wall measured 0.39 cm width.

The colon walls presented intact yet mild thickened wall layering. Semi formed fecal matter was present in the colon lumen with lumen gas.

Pancreas

The pancreas was normal in size and contour with heterogeneous to mild hyperechoic parenchyma compared to adjacent omentum. No signs of active inflammation or neoplasia.

Free Abdomen

No omental masses, overt lymphadenopathy or peritoneal effusion was present.

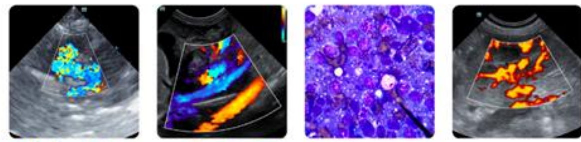
ULTRASONOGRAPHIC FINDINGS

Primary

- Benign hepatopathy pattern suggestive of vacuolar hepatopathy criteria
- Normal gallbladder
- Prominent non-homogenous remodeled pancreas- benign remodeling owing to previous inflammation vs probable chronic pancreatitis
- Mild gastritis / colitis pattern, structurally unremarkable empty small intestine
- Normal bilateral adrenal glands

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

No evidence of mechanical gastrointestinal obstruction or foreign material. Chronic pancreatitis is



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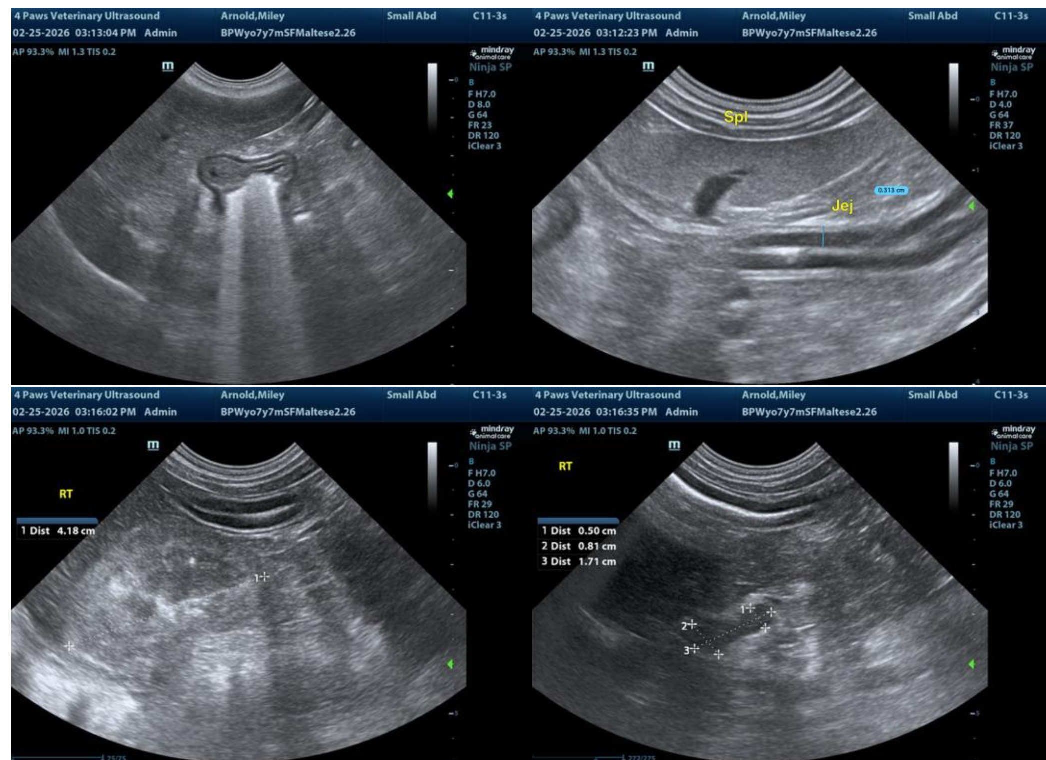
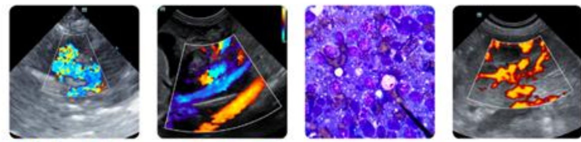
likely if cranial abdomen/subxiphoid discomfort on palpation and given gastrointestinal signs a more generalized gastroenterocolopathy i.e. IBD or other may present with unremarkable small intestinal wall. A GI panel to include PLI/TLI/Cobalamin/Folate is recommended. Empirically, a limited antigen or hydrolyzed diet trial with potential long term dietary therapy, prophylactic deworming (Panacur 50 mg/kg SID x 5 consecutive days with repeat protocol in 3 weeks even if fecal testing is negative), high colony count probiotic (Proviable or Visbiome), cobalamin supplementation pending assessment of cobalamin level +/- antibiotic trial with consideration for adverse effects on normal GI flora with long term antibiotic use and as needed gastrointestinal support with assessment of clinical response may prove beneficial. Intestinal biopsies may be indicated if GI signs continue despite empirical therapy.

Sonographic monitoring of the gastrointestinal tract and pancreas recommended if recurrent or persistent gastrointestinal signs.





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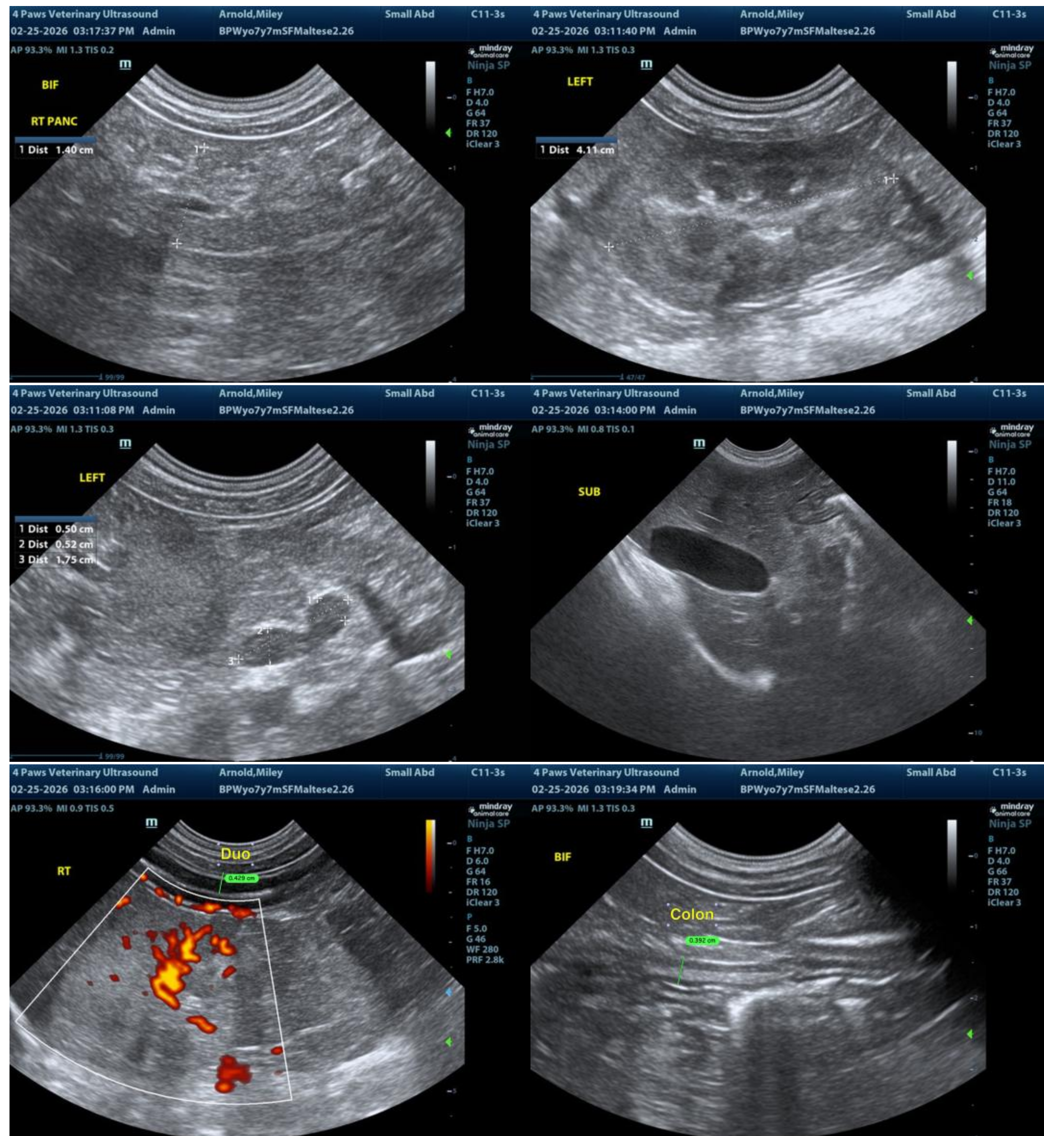

The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

R. McKenzie Daniel, DVM, DABVP (Canine/Feline Practice)
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