Pennsylvania Mobile
VETERINARY ULTRASOUND SERVICES

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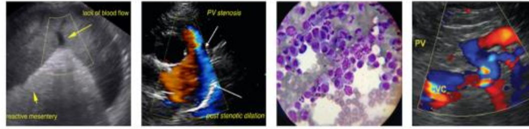


SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
1-800-838-4268 info@sonopath.com SonoPath.com

PATIENT
Beans Robinson

SPECIES
Canine

BREED
Pug Mix

SEX
MN

AGE
2010

WEIGHT
18.1

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

IMAGING PERFORMED BY
Rebekah Jakum, CVT ARDMS/RVT

HOSPITAL NAME
Lehigh Valley AH (Allen)

REFERRING VET
Dr. Hersh

INVOICE
20633

DATE
1/19/23

PRESENTING CLINICAL SIGNS

Weight loss, vomiting, bloody diarrhea. Medication: Metronidazole, Fortiflora, Cerenia Labs: Unremarkable CBC and chemistry panel, sodium to potassium ratio 32

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of 2.0 cm exhibited normal thickness and tone. Anechoic urine was present in the lumen with no uroliths or sediment. The ureteral papillae were normal. The ureters were not visible which is normal. No evidence of inflammatory or neoplastic changes was noted.

The residual prostate was symmetrically normal in size with uniform parenchyma and slight coarse echotexture measuring 0.65 cm in diameter.

The area of the aortic trifurcation was free of pathology.

Normal size and margination were present in the kidneys. A normal 1:3 cortex / medulla ratio was maintained. The medulla and cortices were uniform in texture with some increased echogenicity and mild loss of corticomedullary symmetry and definition expected for the age of the patient. No evidence of pelvic dilation was present. The left kidney measured 4.3 cm in length. The right kidney measured – cm in length.

Adrenal Glands

No overt pathology in the area of the left or right adrenal glands.

Spleen

The spleen was normal to possibly borderline enlarged in size. Symmetrical capsule contour was maintained. Subtle splenic parenchyma heterogeneity was noted. A solitary subtly expansive well-demarcated uniform hypoechoic nodule was noted in the cranial spleen, measuring 1.0 cm in diameter. The nodule did not distort the splenic capsule.

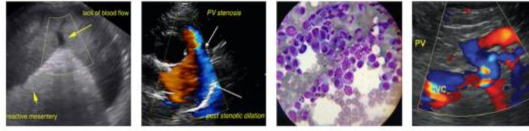
Liver/ Gallbladder

The liver was subjectively normal in size, structure, and contour. The liver parenchyma was mildly nonuniform and hypoechoic to the spleen with a moderate coarse echotexture and subjective mild to benign parenchymal remodeling. The hepatic and portal vasculature were normal in appearance without signs of congestion.

The gallbladder was non-distended in size with thin walls and primarily anechoic luminal content. The cystic and common bile ducts were normal.

Gastrointestinal

The stomach presented intact wall layering with a normal wall layer ratio. The lumen of the stomach contained mild to moderate ingesta, exhibiting subtle progressive distal acoustic shadowing. The stomach was otherwise normal. No evidence of mechanical pyloric outflow obstruction.



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The small intestine presented intact wall layering with 1:3 muscularis/mucosa ratio. The lumen of the small intestine was empty with no evidence of mechanical/metabolic ileus.

Normal visible colon wall layers were present with semi-formed to soft fecal matter in lumen, consistent with patient history.

Pancreas

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

Free Abdomen

No omental masses, lymphadenopathy or peritoneal effusion was present.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- Nonspecific mildly expansive cranial splenic nodule- hyperplasia, hematopoiesis, hematoma, focal splenitis, granuloma, emerging nodular neoplastic criteria are all potentials.
- Hepatic parenchyma remodeling- benign
- Intact gastroenterocolic wall layering with mild gastric ingesta
- Heterogenous pancreas

Secondary Findings

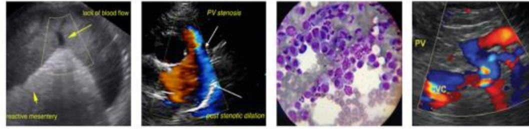
- Early minor age-related kidneys

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Overall, no sonographic evidence of significant gastroenterocolic structural pathology or mechanical obstructive criteria. At times the gastroenterocolic sonographic presentation may not correlate with patients clinical signs. Dietary intolerance/food allergy, dysbiosis, inflammatory bowel disease, low grade to chronic pancreatitis, occult parasitism, occult Addisons disease, infiltrative neoplasia are all potentials. Further assessment may include a GI panel to include PLI/TLI/Cobalamin/Folate, resting cortisol level to rule out occult Addisons disease and three view chest radiographs.

The presence of gastric ingesta is nonspecific and likely indicates post-prandial presentation. Correlation with most recent meal ingestion is recommended. If documented NPO prior to the ultrasound, the presence of gastric ingesta may indicate some degree some of gastric hypomotility or metabolic stasis. The sonographic presentation of the ingesta was most consistent with food, without evidence of foreign material. Further renal staging to include urine C/S and protein: creatinine ratio on sterile urine sample may be considered. Sonographic monitoring for evidence of gastric emptying over the next 12-24 hours may be considered if clinically indicated.

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) +/- antibiotic trial and as needed gastrointestinal support with assessment of clinical response may prove beneficial.



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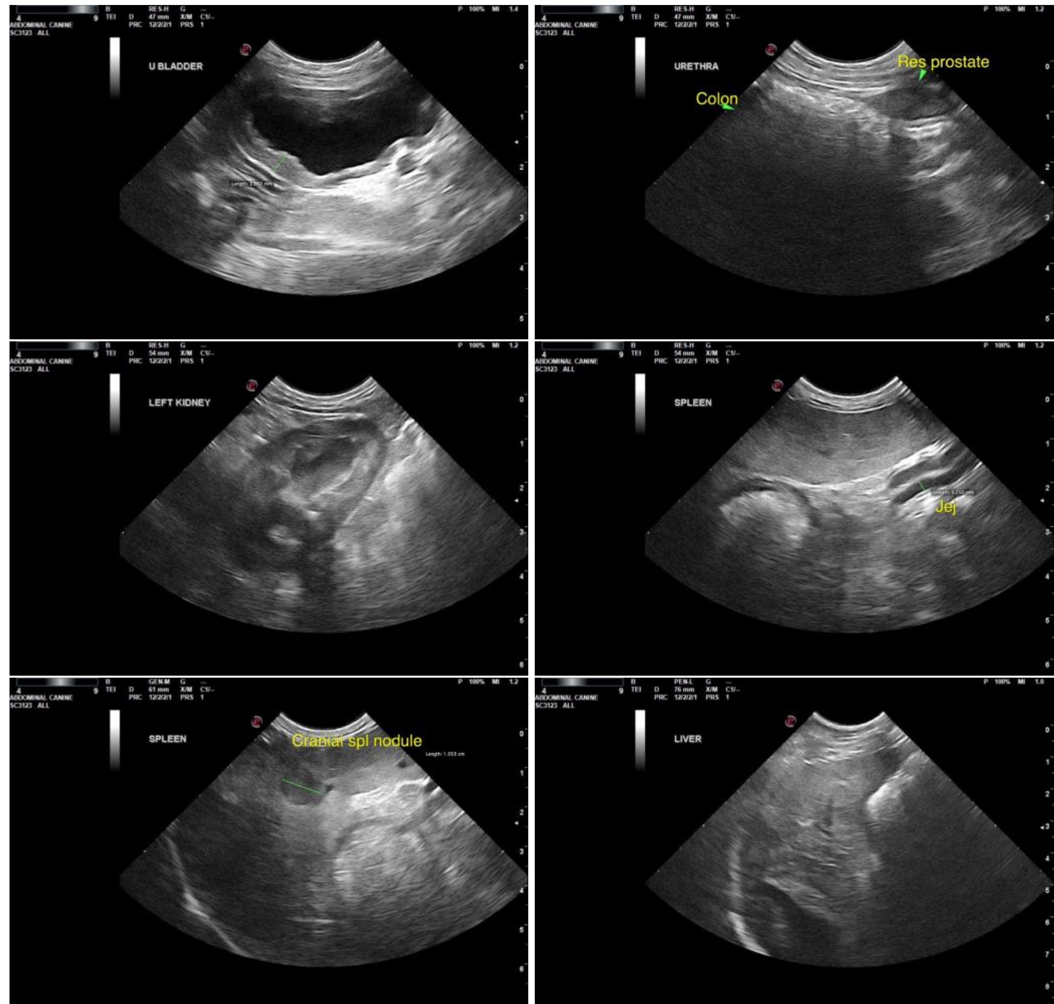
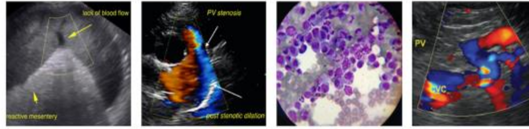
Intestinal biopsies may be indicated if GI signs continue despite empirical therapy and additional diagnostics.





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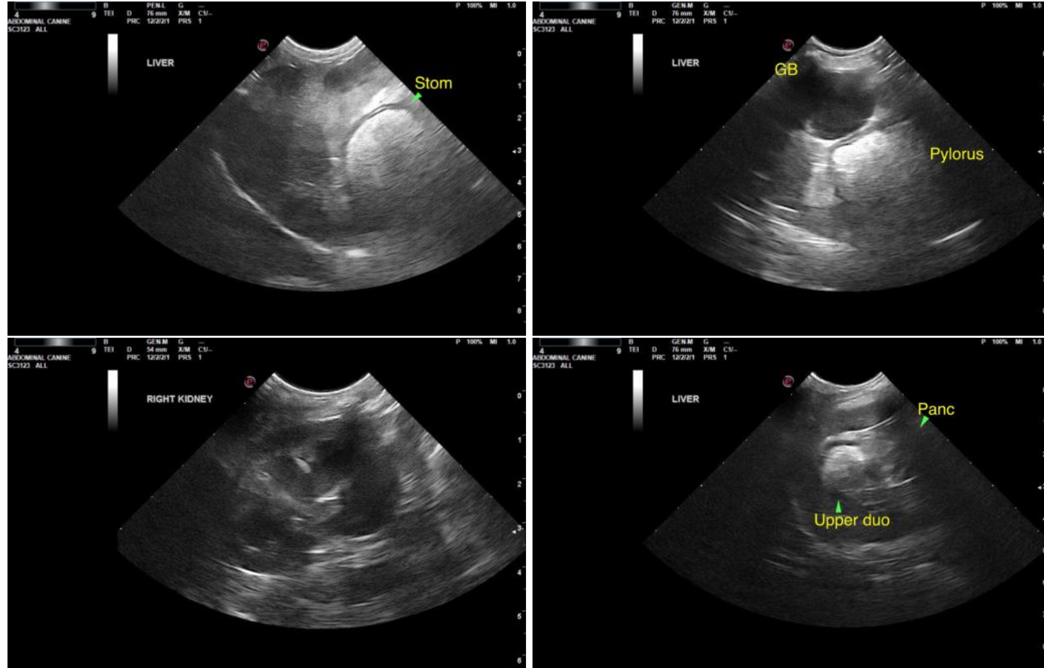

The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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)
mac.daniel@sonopath.com