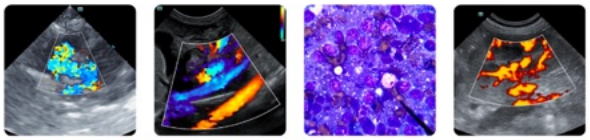


PATIENT

Betty White Goins

SPECIES

Canine

BREED

Bichon

SEX

Spayed female

AGE

9 years

WEIGHT

23 lbs

INTERPRETED BY

Alicia Angosto Guerrero, DMV, PgDip, MSc.

IMAGING PERFORMED BY

Dr. Becky Meier-Gast

HOSPITAL NAME

Meier VC

REFERRING VET

Dr. Meier-Gast

INVOICE

74438

DATE

4/13/26

PRESENTING CLINICAL SIGNS

History: Came in because of inappetence. Blood work performed. Hypocalcemia, hypoalbuminemia , hypocholestremia, and mildly raised pancreaticlipase was seen on bloodwork. Abdominal ultrasound was performed.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder is normally distended, with a thin and smooth wall. The urine is anechoic. The bladder neck and proximal urethra are unremarkable. No uroliths or evidence of inflammatory or neoplastic changes are identified.

The left kidney is normal in shape and size (4.77×2.38 cm), with cortical thickness measuring 0.35 cm in the sagittal plane. The cortex is isoechoic relative to the hepatic parenchyma. Corticomedullary ratio and definition are preserved. No pyelectasia, nephrolithiasis, or hydronephrosis is identified.

The right kidney is normal in shape and size (5.01×2.40 cm), with cortical thickness measuring 0.37 cm in the sagittal plane. The cortex is isoechoic relative to the hepatic parenchyma. Corticomedullary ratio and definition are preserved. No pyelectasia, nephrolithiasis, or hydronephrosis is identified.

Adrenal Glands

Both adrenal glands show normal shape and echogenicity. Dorsoventral diameters measured in the sagittal plane: The left adrenal gland measures 0.41 cm at the cranial pole and 0.48 cm at the caudal pole. The right adrenal gland partially visualized: 0.42 cm.

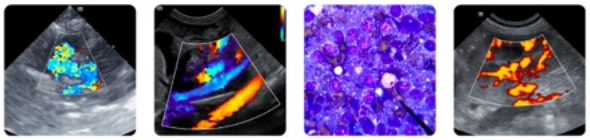
Spleen

Splenic thickness is 0.89 cm. The parenchyma demonstrates normal echogenicity and fine homogeneous echotexture without focal parenchymal abnormalities. The splenic capsule is smooth and regular.

Liver

The liver is subjectively normal in size, with sharp edges and a regular contour. The liver parenchyma looks uniform and isoechoic compared to the falciform fat, with a normal echotexture. No hepatic lymphadenopathy is observed.

The gallbladder lumen is normally distended. The wall is thin and the contents are primarily anechoic with a small amount of biliary sludge. No evident dilation of the cystic duct or common bile duct is observed.



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Gastrointestinal

The stomach is empty and folded, with mural thickness of 2.24 mm and preserved wall layering (within normal limits). The pylorus measures 5.81 mm (within normal limits). The duodenum measures 3.98 mm (within normal limits). The jejunum measures 3.87 mm, which is within normal limits for total wall thickness (<5 mm); however, it appears subjectively mildly thickened and contains a small amount of intraluminal fluid. Layer measurements: mucosa 3.32 mm, submucosa 0.68 mm, muscularis propria 0.30 mm, resulting in a muscularis-to-mucosa ratio of approximately 0.09 (within normal limits, typically <0.5–0.6). Wall layering is preserved. A segment of the jejunum shows mildly increased mucosal echogenicity. No clear evidence of lacteal dilation is identified, although subtle lymphangiectasia cannot be excluded with the current resolution. The colon measures 0.79 cm in diameter, containing a small amount of soft fecal material.

Pancreas

The pancreas measures approximately 0.96–1.31 cm in thickness (within normal limits for a dog of this size, typically up to ~1.5 cm). The parenchyma demonstrates a striated ("tiger stripe") appearance, suggestive of interstitial edema.

Free Abdomen

A moderate amount of anechoic abdominal effusion is present. No sonographic evidence of abdominal lymphadenomegaly is identified. The iliac trifurcation appears normal.

Thoracic cavity

Pleural effusion is present with secondary pulmonary atelectasis.

PRIMARY FINDINGS

- Moderate abdominal effusion and pleural effusion.
- Subjectively mildly thickened small intestine with mild fluid distension and increased mucosal echogenicity.
- Pancreatic striated appearance (suggestive of edema).

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The combination of moderate abdominal and pleural effusion in conjunction with the reported hypoalbuminemia and hypocholesterolemia strongly supports a state of reduced oncotic pressure, most consistent with a protein-losing process.

The small intestine appears subjectively mildly thickened, with preserved wall layering and a normal ratio. The presence of mild mucosal hyperechogenicity and luminal fluid, although nonspecific, is

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compatible with intestinal disease. While overt ultrasonographic evidence of lymphangiectasia (mucosal striations) is not clearly identified, this condition cannot be excluded, particularly given the biochemical profile and known limitations of ultrasound in detecting early or subtle lacteal dilation.

Taken together, the imaging and laboratory findings are most consistent with a protein-losing enteropathy, with lymphangiectasia and inflammatory enteropathy as primary differentials. The absence of lymphadenomegaly and preservation of normal wall layering make high-grade lymphoma less likely, although low-grade disease cannot be entirely excluded.

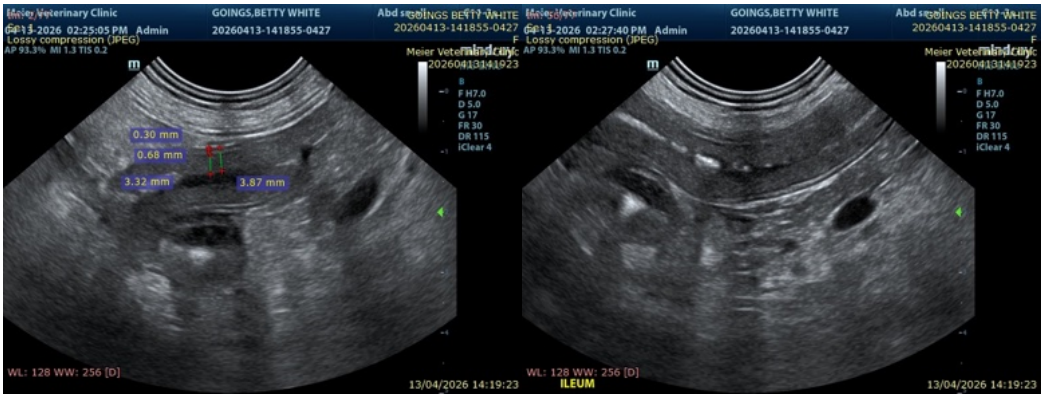
The pancreas demonstrates a striated appearance suggestive of mild interstitial edema. In the context of mildly increased pancreatic lipase, this may represent mild or reactive pancreatitis; however, the absence of significant peripancreatic fat changes suggests this is not the primary driver of the clinical presentation.

The pleural effusion is clinically relevant, as it is associated with secondary pulmonary atelectasis.

Recommendations

- Further evaluation and management of the suspected protein-losing enteropathy are recommended. Given the presence of pleural effusion with secondary pulmonary atelectasis, respiratory status should be closely monitored, and therapeutic thoracocentesis may be considered if clinically indicated.
- Measurement of serum cobalamin and folate may provide additional information regarding intestinal function. Correlation with urinalysis, including urine protein quantification, is advised to exclude concurrent protein-losing nephropathy.
- Definitive differentiation between inflammatory enteropathy, lymphangiectasia, and less likely infiltrative disease would require intestinal biopsy, although this should be weighed against patient stability and response to initial therapy. Supportive management of hypoproteinemia, including appropriate dietary modification, is warranted.

Final diagnostic and therapeutic decisions should be made by the attending veterinarian, who can best integrate these findings with the patient's clinical status.



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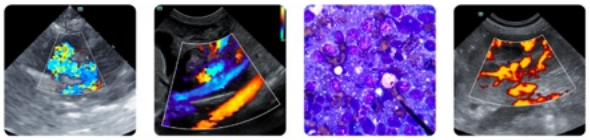

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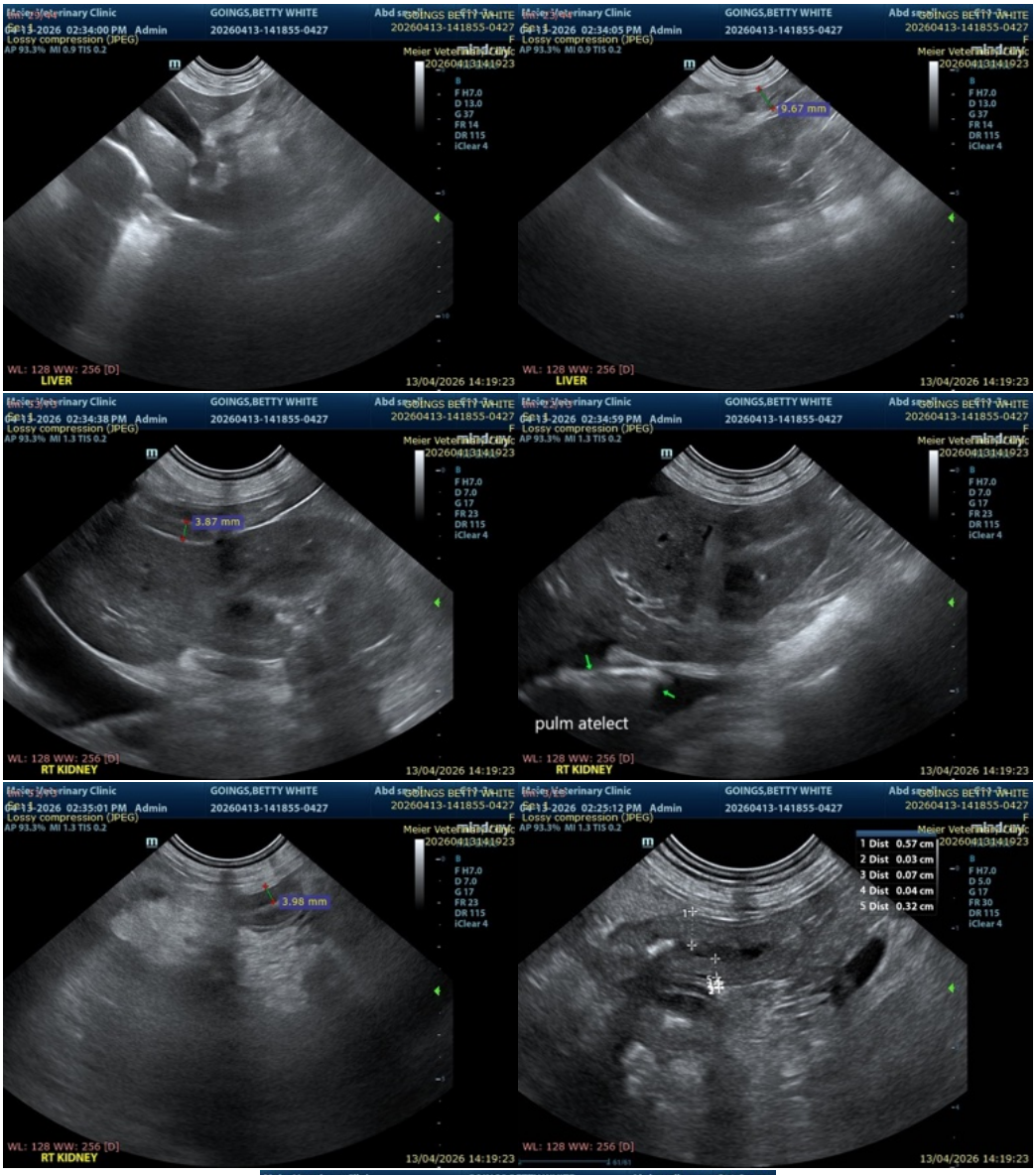

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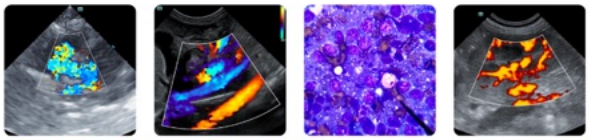

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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

Alicia Angosto Guerrero, DMV, PgDip, MSc.

info@SonoPath.com