



PATIENT

Spock Smith

SPECIES

Canine

BREED

Chihuahua

SEX

Neutered male

AGE

7 years

WEIGHT

13 lbs

INTERPRETED BY

Alicia Angosto
Guerrero, DMV,
PgDip, MSc.

IMAGING PERFORMED BY

Brian Klug

HOSPITAL NAME

Sondel Family VC

REFERRING VET

Dr. Mortenson

INVOICE

74946

DATE

4/28/26

PRESENTING CLINICAL SIGNS

History: Recurring pancreatitis not responding to current treatment
Chronic diarrhea with variable consistency (sometimes solid, sometimes liquid, sometimes starts solid then becomes liquid)

Malodorous, greasy-smelling flatulence

Generally good appetite and attitude

Occasional days of discomfort upon waking

Client administers Zofran and analgesics PRN for discomfort episodes

Responds well to metronidazole (firms stool within 1-2 doses, no defecation for ~36 hours, then solid briefly before diarrhea returns)

Epileptic - managed on pheno

Abnormal PE/Chem/CBC/UA Results: Small SQ mass on abdomen NSF on previous BW Pheno levels - low end of therapeutic

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 appear normal. No calculi or evidence of inflammatory or neoplastic changes are identified.

The left kidney measures 3.88×2.23 cm, with a cortical thickness of 0.38 cm in the sagittal plane. The right kidney measures 3.60×1.99 cm, with a cortical thickness of 0.24 cm in the sagittal plane. Both kidneys are normal in shape and size for a dog of this body weight (expected length approximately 3.5–5.0 cm). The cortex is isoechoic relative to the liver parenchyma. The corticomedullary ratio is within normal limits, and corticomedullary definition is preserved. Within the renal collecting system, a few small punctate hyperechoic foci are identified, consistent with early/mineral sediment or incipient nephrolith formation. No acoustic shadowing or associated pelvic dilation is observed. No pyelectasia 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 0.42 cm at the cranial pole and 0.45 cm at the caudal pole. The right adrenal gland measures 0.48 cm at the cranial pole and 0.48 cm at the caudal pole.

Spleen

Splenic thickness is 1.28 cm. The parenchyma demonstrates normal echogenicity and fine homogeneous echotexture without focal parenchymal abnormalities. The splenic capsule is smooth and regular.



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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.

Gastrointestinal

The stomach is empty and folded, with a wall thickness of 3.13 mm and preserved layering (within normal limits). The pylorus measures 4.92 mm, within normal limits. The duodenum measures 3.04 mm, within normal limits. The jejunum measures 3.87 mm, which is at the upper end of normal to mildly increased (typical ~2–4 mm), with preserved wall layering. Layer measurements: mucosa 1.85 mm, submucosa 0.62 mm, muscularis propria 0.40 mm. The muscularis-to-mucosa ratio is approximately 0.22, which is within normal limits. No ultrasonographic evidence of ileus, obstruction, or foreign material is identified. The colon measures: ascending 1.21 mm, transverse 1.22 mm, and descending 0.84 mm, within normal limits. Soft fecal material is present throughout the colon.

Pancreas

The evaluated pancreatic regions do not show evidence of overt inflammation or neoplastic disease.

Free Abdomen

No abdominal effusion or peritonitis is observed.

Cranial mesenteric lymph nodes measure 4.06–4.30 mm and have normal shape and echogenicity. A caudal mesenteric lymph node measures 6.11×9.11 mm and appears rounded and hypoechoic.

The iliac trifurcation region appears normal.

PRIMARY FINDINGS

- Mild jejunal wall thickness at the upper limit of normal
- Mild enlarged, rounded, hypoechoic caudal mesenteric lymph node

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The gastrointestinal tract is largely unremarkable on ultrasound, with preserved wall layering and only minimal jejunal thickening at the upper limit of normal. Importantly, there is no mucosal abnormalities, no muscularis hypertrophy, no loss of layering, and no focal lesions.

The most notable abnormality is a rounded, hypoechoic caudal mesenteric lymph node, which is



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enlarged relative to expected size and morphology. In this clinical context, this finding most likely represents reactive lymphadenopathy, although early or low-grade infiltrative disease cannot be completely excluded based on ultrasound alone.

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The pancreas appears unremarkable. However, it is important to emphasize that ultrasound has limited sensitivity for chronic or mild pancreatitis, and a normal appearance does not exclude pancreatic disease.

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Given the clinical history—chronic diarrhea with malodorous, greasy stool, marked flatulence, and a rapid but transient response to metronidazole—the overall picture is not strongly supported by the ultrasonographic findings. Specifically, there is no convincing sonographic evidence of recurrent or active pancreatitis, and only minimal intestinal changes are present. The clinical pattern is more consistent with:

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- Chronic enteropathy with a dysbiosis component
- Exocrine pancreatic insufficiency.

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Incidental early mineralization within the renal collecting system is noted, without evidence of obstruction or secondary changes. This finding is of uncertain clinical significance at this stage.

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Overall, this is best interpreted as a clinically significant gastrointestinal disorder with minimal structural ultrasonographic changes, where functional disease (maldigestion/malabsorption, microbiota imbalance) is more likely than overt structural pathology.

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Recommendations

- Serum TLI (trypsin-like immunoreactivity) is strongly recommended to evaluate for exocrine pancreatic insufficiency, as this diagnosis cannot be assessed via ultrasound and fits the clinical presentation well.
- Consider cobalamin and folate measurement, as deficiencies are common in chronic enteropathies and EPI.
- A targeted dietary trial (highly digestible or hydrolyzed diet) is appropriate if not already performed.
- Given the response to metronidazole, evaluation and management of intestinal dysbiosis should be considered (antibiotic trial, probiotics, or microbiome-directed therapy).
- If clinical signs persist despite appropriate medical management, further investigation (including repeat imaging or intestinal biopsy) may be considered, although current imaging does not strongly support infiltrative disease.

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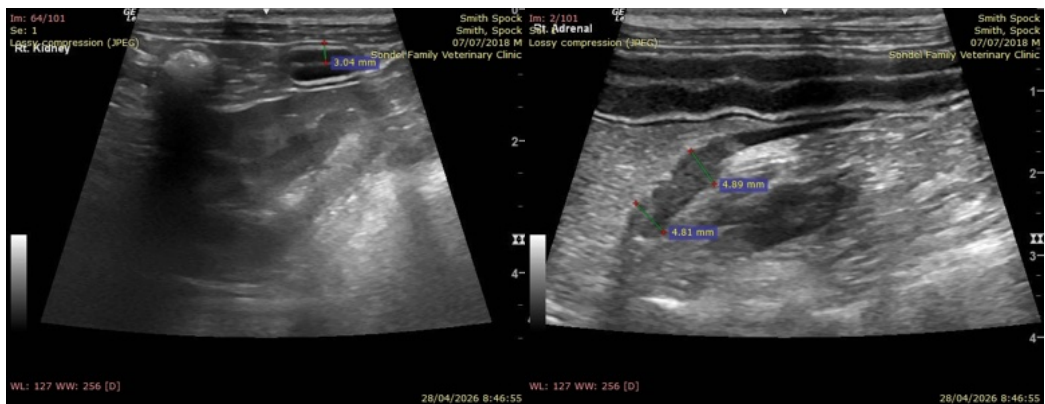
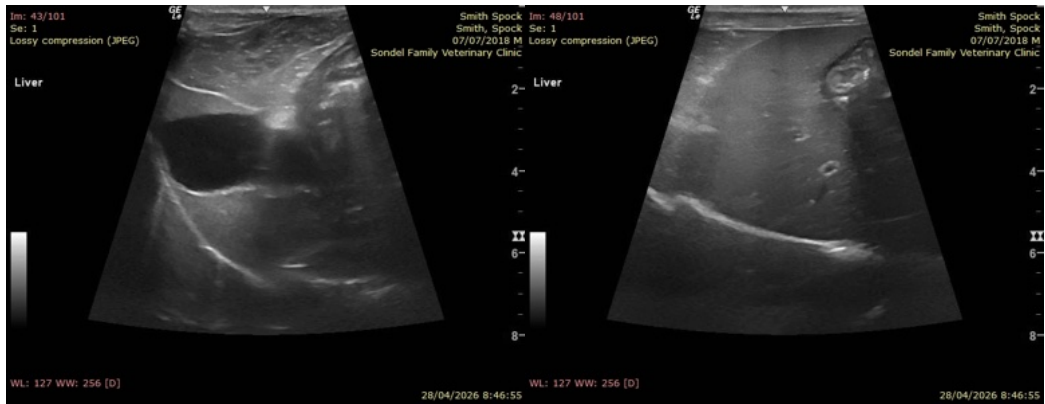
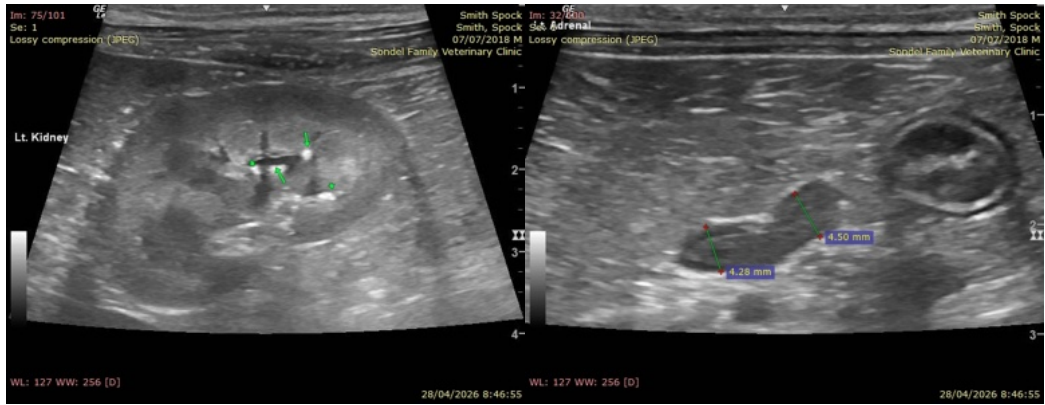
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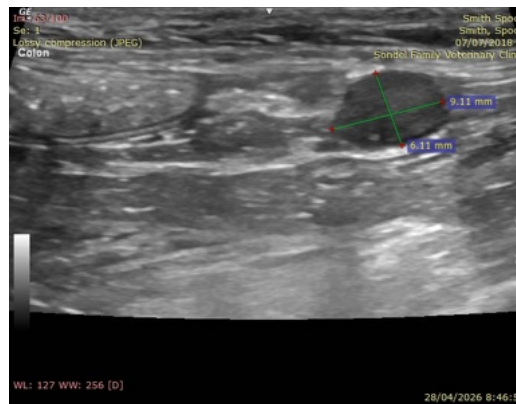
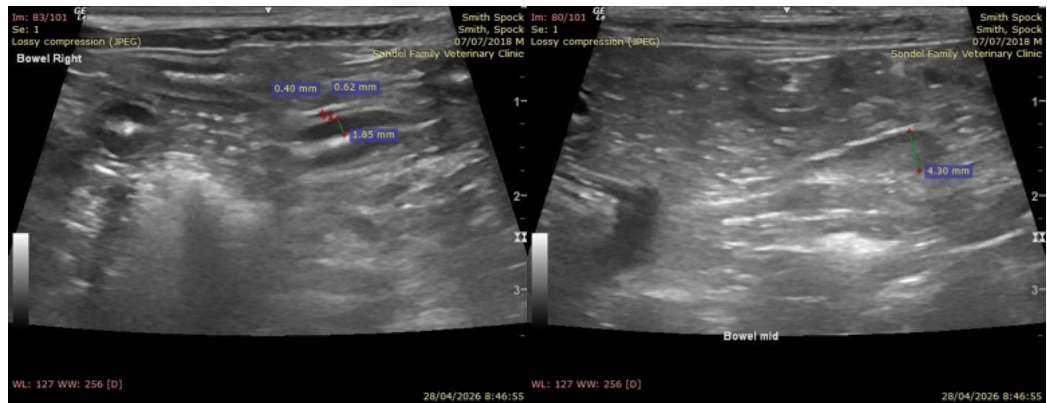
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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