



PATIENT

Charlie Smith

SPECIES

Canine

BREED

Yorkie

SEX

NM

AGE

13 years

WEIGHT

8.3 lbs.

INTERPRETED BY

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

**IMAGING
PERFORMED BY**

Sarah Pender, CVT

HOSPITAL NAME

SVS Imaging QC

REFERRING VET

Dr. Kristin Hook

INVOICE

13398

DATE

2/23/22

PRESENTING CLINICAL SIGNS

Vomiting since Jan 24th 2022 1 to 2 times daily patient becomes lethargic on days she's vomiting. When patient eats sometimes he'll vomit food back up. Feb 5th 2022 bloody diarrhea started then Feb 6th in the morning appeared bright red, frank mucous viscous. stool. Has lost about 2lbs. Has been hospitalized for treatment of pancreatitis and got better. Then reoccurs. Recently did pred trial which did not seem to yield improvement.
Abnormal PE/Chem/CBC/UA Results: CPLI Abnormal WBC 21, neut 16.9, mono 1.6, Baso 0.12, ALT 411, Amylase 1545, Lip 3463

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 area of the residual prostate was free of overt pathology.

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 3.7 cm in length. The right kidney measured 3.5 cm in length.

Adrenal Glands

The left adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 1.5 cm length x 0.61 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 1.8 cm length x 0.4 cm width at the caudal pole.

Spleen

The spleen exhibited primarily finely textured and homogenous parenchyma which was hyperechoic to the liver and renal cortical parenchyma. Indistinct, non-expansive echogenic nodules were present throughout the cranial to caudal 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 or neoplastic changes were not noted. The echogenic nodules tend to trend benign and are most consistent with benign hyperplasia or myelolipomas.

Liver/ Gallbladder

The liver was mildly enlarged in size with normal 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 mildly distended in size. The gallbladder

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walls were overtly normal without evidence of inflammatory changes or thickening. Moderate, nondependent to focally congealed, nonmineralized, luminal debris was present. The common bile duct exhibited potential for mild nonobstructive dilation potentially extending into the level of the duodenal papilla, although the common bile duct was indistinctly visualized owing to regional increased omental artifact.

Gastrointestinal

The stomach presented wall thickening secondary to echogenic mucosa hypertrophy. Intact wall layering was maintained and distinct. The gastric body wall measured 0.32 cm width. The stomach was primarily empty with mild retained anechoic fluid. The pylorus wall width measured 0.50 cm.

The duodenum exhibited intact yet thickened wall layering with focal areas of indistinct wall layer detail and evidence of duodenal mucosal and muscularis hyperechoic speckling. The duodenum wall width measured 0.74 cm. The jejunum and ileum to the level of the colon exhibited intact wall layering with primarily maintained 1:3 muscularis/mucosa ratio with intermittent jejunal mucosal speckling. The jejunum wall width measured 0.25 cm.

The colon exhibited intact yet mildly prominent wall layering with primarily empty lumen.

Pancreas

The pancreas exhibited subjective prominent size with mixed echogenic parenchyma. Regional peripancreatic to generalized cranial abdominal, mildly nonuniform, hyperechoic mesentery was present.

Free Abdomen

Focal to intermittent pancreaticoduodenal lymph nodes were present. These lymph nodes were homogenous, mildly hypoechoic and smoothly marginated. A normal width: length ratio was maintained (<0.5). Evidence of perilymphatic inflammation was evident. No overt free fluid was noted.

ULTRASONOGRAPHIC FINDINGS***Primary Findings***

- Active to chronic active pancreatitis with parenchymal remodeling and potential for emerging fibrosis, regional nonuniform peripancreatic to cranial abdominal hyperechoic mesentery and associated mild pancreaticoduodenal lymphadenitis
- Moderate to significant gastroduodenitis, mild colitis
- Hepatopathy with parenchymal remodeling - suspect reactive to low-grade inflammatory hepatopathy
- Moderate nondependent to focally congealed gallbladder debris - potential for emerging gallbladder mucocele

Secondary Findings

- Benign splenic nodules - consistent with probable myelolipomas
- Mild chronic renal changes



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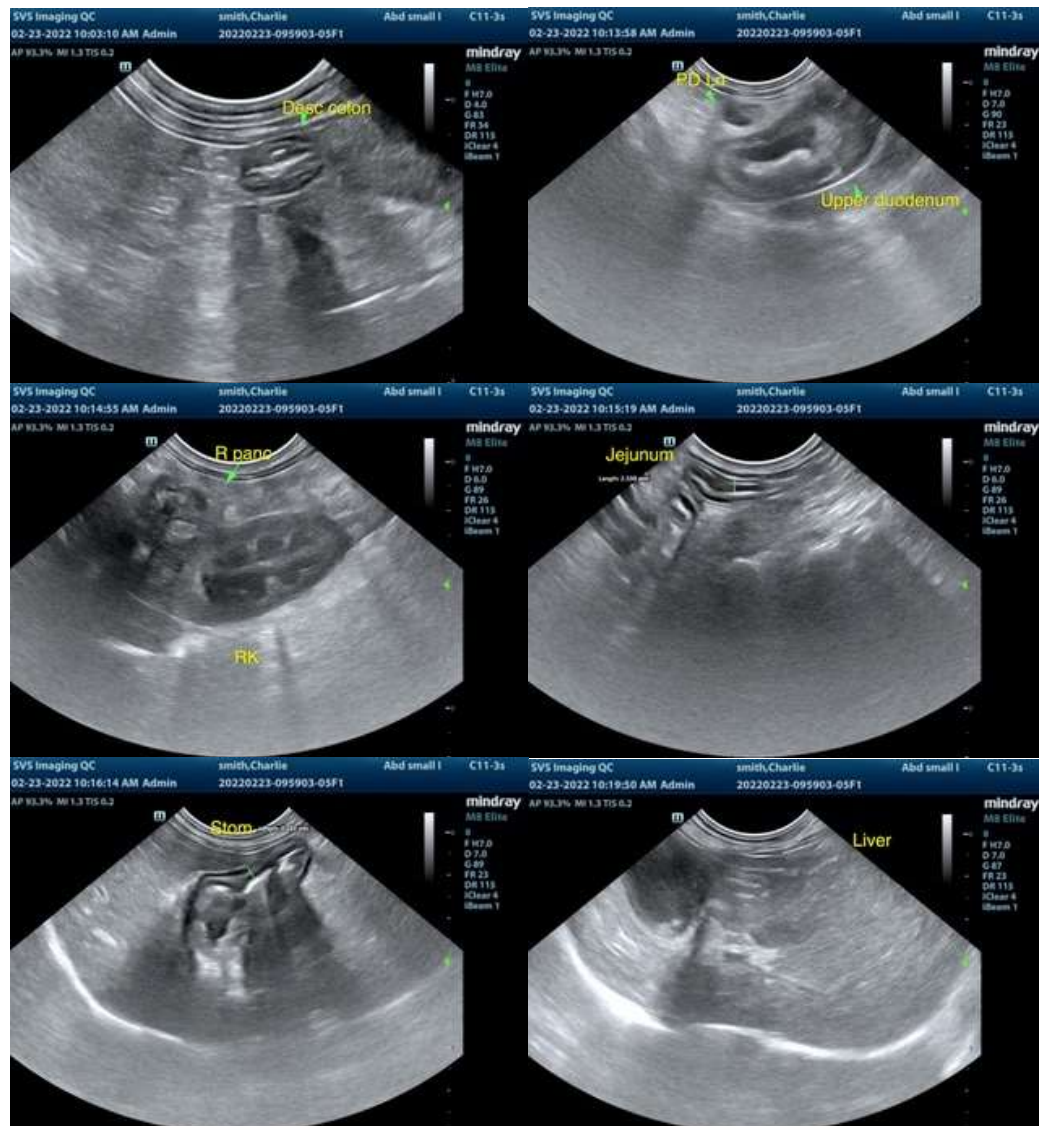
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INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Potential for an emerging neoplastic process involving the pancreas and possible duodenum, although thought less likely at this time, cannot be definitively excluded.

Aggressive therapy for active to chronic active pancreatitis along with gastroenterocolitis is recommended. Ideally, sonographic monitoring of the pancreas and gastrointestinal tract for evidence of progressive inflammatory changes with potential for ultrasound-guided FNA of the pancreas, if clinically indicated, is recommended. A GI panel to assess serum cobalamin/folate levels is warranted given the patient's weight loss.





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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.

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