



PATIENT

Melia Stokes

SPECIES

Canine

BREED

Chihuahua X

SEX

Spayed female

AGE

6 years

WEIGHT

4.4 kg

INTERPRETED BY

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

**IMAGING
PERFORMED BY**

Dr. Belan

HOSPITAL NAME

McKnight 24 Hour
AH

REFERRING VET

Dr. Gavin

INVOICE

10170ag

DATE

03/15/2022

PRESENTING CLINICAL SIGNS

History: Vomiting and diarrhea on maropitan and pantoprazole 4/6 murmur Echo 60 images Ab 48 108 total

Abnormal PE/Chem/CBC/UA Results: Mild elevation of ALT stress leukogram

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 uroliths or sediment. The ureteral papillae were normal. The ureters were not visible which is normal. No evidence of inflammatory or neoplastic changes were 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. The left kidney measured 4.3 cm in length. The right kidney measured 4.3 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 0.54 cm width at the caudal pole and 0.59 cm width at the cranial pole. The right adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The right adrenal gland measured 0.59 cm width at the caudal pole and 0.34 cm width at the cranial pole.

Spleen

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

The liver presented normal in size. The hepatic parenchyma revealed generalized mildly reduced echogenicity compared to the spleen and renal cortical parenchyma with a mild coarse echotexture. Mildly increased portal vein prominence was evident. The capsule of the liver was normal in margination. Distinct masses or nodules were not evident. The hepatic and portal vasculature were normal in appearance.

The gallbladder was non-distended in size with moderate nondependent to congealed yet nonorganized debris occupying the majority of the lumen. The debris was subjectively mobile. The gallbladder walls were overtly normal without evidence of inflammatory criteria. No evidence of peripheral gallbladder inflammation was noted. The cystic and common bile ducts were normal.



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Gastrointestinal

The stomach presented intact wall layering with a mildly prominent wall layering. Mild to moderate luminal gas was present. The lumen of the stomach was empty with no signs of ileus, obstruction or foreign material. The gastric body wall measured 0.44 cm.

The duodenum and jejunum presented intact wall layering with 1:3 muscularis/mucosa ratio to the level of the ileum. Subjective mild prominent to hypoechoic ileal walls extending to the ileocolic junction were observed. The ileum wall measured 0.31 cm. The lumen of the small intestine was empty with no signs of ileus, obstruction or foreign material. The duodenum wall measured 0.29 cm. Intermittent mildly prominent to enlarged colic nodes adjacent to the ileocolic junction were present. An example of a lymph node measured 0.22 cm in diameter. No effusion was noted.

Normal visible colon wall layers were present with apparent formed feces in lumen.

Pancreas

The parenchyma of the left limb, body and right limb of the pancreas presented isoechoic to the adjacent omental fat. A normal curvilinear capsule contour of the pancreas was present. The visible pancreatic duct was normal. No signs of active inflammation or neoplastic disease was evident.

Free Abdomen

Intermittent mildly prominent to enlarged colic nodes adjacent to the ileocolic junction were present. An example of a lymph node measured 0.22 cm in diameter. No effusion was noted.

ULTRASONOGRAPHIC FINDINGS

Abdomen

- Low grade hepatopathy-subjectively benign, suspect low grade mild reactive or inflammatory hepatopathy given the mildly elevated ALT.
- Moderate congealed yet subjectively mobile gallbladder debris, possible very early gallbladder mucocele. No current signs of inflammation.
- Gastroenterocolitis pattern with subjective mild to moderate ileitis, associated minor benign colic lymphadenopathy.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Potential for low grade cholangiohepatitis may be a consideration given the mild ALT elevation and presence of moderate gallbladder debris. Assessment of T4 levels given the gallbladder presentation may be considered as gallbladder mucoceles have been associated with hypothyroidism.

Hepatosupportive medications including ursodiol are recommended along with monitoring for evidence of increasing cholestasis or cranial abdominal or subxiphoid discomfort on palpation.

Dietary intolerance/food hypersensitivity, occult parasitism, structurally insignificant inflammatory gastroenteropathy are possible with low grade to chronic pancreatitis is considered less likely. 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



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even if fecal testing is negative), high colony count probiotic (Provable or Visbiome), antibiotic trial and as needed gastrointestinal support with assessment of clinical response may prove beneficial.

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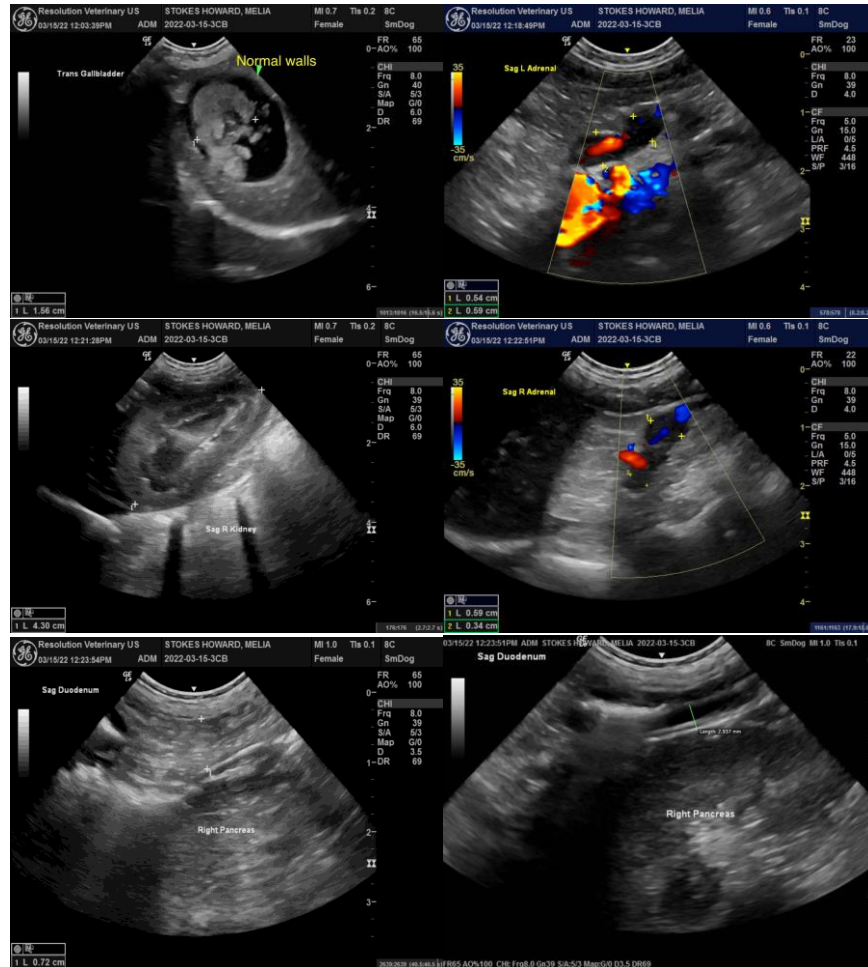
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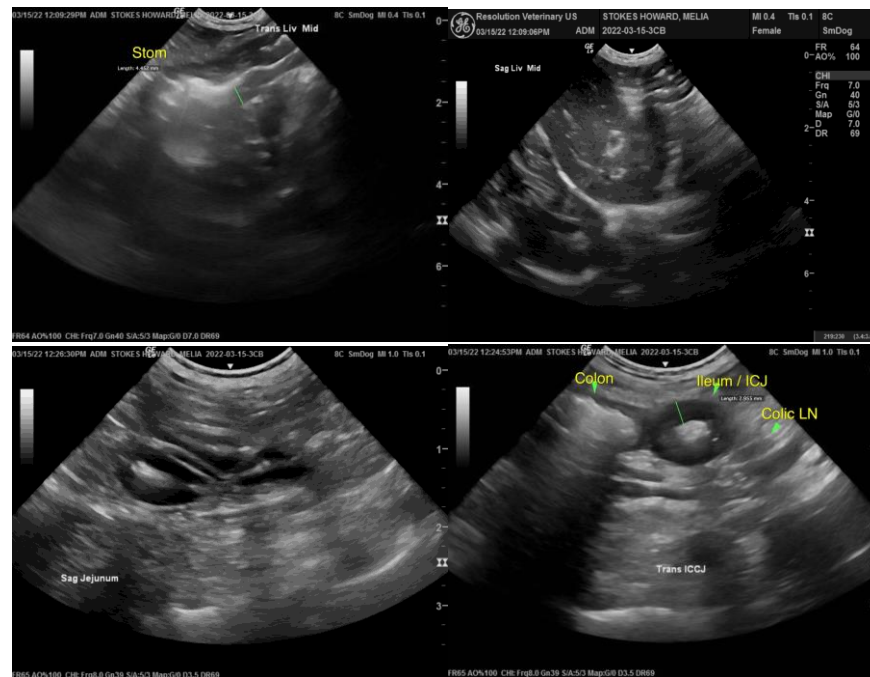
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

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

info@SonoPath.com