



PATIENT PRESENTING CLINICAL SIGNS

Blue Morin History: Poor appetite and diarrhea x 1 week. Perineal hernia 10/2020. Thin, pot-bellied with fluid wave. Diarrhea. Hernia soft and non-painful. Mildly dehydrated.
Abnormal PE/Chem/CBC/UA Results: Na:K ratio = 23. Elevated BUN, but normal Creat, possibly due to loss of muscle mass? ACTH Stimulation test pending.

Canine

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

BREED *Urinary System*

Heeler

The urinary bladder 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.

SEX

Intact Male

The prostate was not definitively visualized owing to pelvic artifact.

AGE

7 Years

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. The left kidney measured 6.9 cm. The right kidney measured 6.5 cm. Mild pyelectasia noted in both kidneys.

WEIGHT

40.2

The area of the aortic trifurcation was free of pathology.

INTERPRETED BY

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

Adrenal Glands

Both adrenal glands were indistinctly visualized owing to peritoneal free fluid and regional omental artifact. The left adrenal gland subjectively measured 0.52 cm at the caudal pole. The right adrenal gland subjectively measured 0.48 cm at the caudal pole.

Spleen

The spleen was subnormal in size and 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.

IMAGING PERFORMED BY

Jenna Walsh, CVT

Liver

The liver was subjectively normal in size, structure, and contour. The liver parenchyma was uniform and hypoechoic to the spleen with a mild coarse echotexture. No evidence of hepatic vasculature congestion. The gallbladder was non-distended in size with thin walls and primarily anechoic luminal content. The cystic and common bile ducts were normal.

HOSPITAL NAME

Rivers Edge PMC

REFERRING VET

Dr. Hayes

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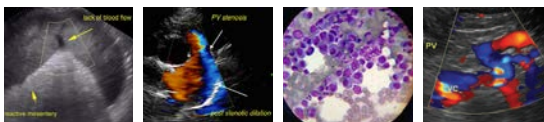
Gastrointestinal

The stomach presented wall thickening secondary to echogenic mucosa hypertrophy. Intact wall layering was maintained and distinct. Mild gastric distension with primarily anechoic fluid was present. Gastric body wall measured 0.46 cm.

DATE

9/24/21

The intestinal walls demonstrated intact wall layering and maintained 1:3 muscularis / mucosa ratio. The mucosa exhibited mild decreased echogenicity with occasional mucosal speckling. A segmental to diffuse



PATIENT ileus pattern consisting of mild fluid accumulation in the intestinal lumen was present without obstruction or foreign material. Duodenum wall measured 0.57 cm. Jejunum wall measured 0.53 cm. No overt evidence of gastrointestinal masses or loss of intestinal wall layering.

Blue Morin

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

Canine **Pancreas**

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

Heeler

Free Abdomen

SEX

Intact Male

Generalized subtly non-uniform omental hyperechogenicity was noted. Significant cellular peritoneal free fluid was present. Within the peritoneal free fluid, intermittent mildly non-homogeneous, free floating, potential nodular lesions were noted, interconnected with hyperechoic tissue, which may suggest fibrin. Example of free floating nodular lesion measured 2.5 cm in diameter.

AGE

7 Years

Brief sonographic assessment of the heart revealed subjective mild left heart cardiomegaly with subnormal myocardial contractility. The right heart was sonographically normal. No evidence of overt pericardial masses or effusion.

WEIGHT

40.2

PRIMARY FINDINGS

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- Significant cellular peritoneal effusion with mildly non-uniform omental hyperechogenicity and intermittent non-specific, free floating nodular lesions – blood clots, neoplasia or other.
- Sonographically unremarkable spleen and liver with mild splenic volume contraction – no overt hepatosplenic masses.
- Bilateral mild renal pyelectasia
- Acute gastroenteritis pattern
- Mildly heterogeneous pancreas – non-specific, patient variant, reactive pancreatic changes, or less likely low-grade inflammation possible.

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SECONDARY FINDINGS

- Subjective mild left cardiomegaly with subnormal myocardial contractility – non-specific.

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INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

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An obvious cause of the peritoneal free fluid was not definitively evident. Given the lack of reported hypoalbuminemia, lack of hepatic congestion, or definitive intraabdominal masses, non-specific, non-septic, septic, or neoplastic effusion possible. Abdominocentesis for fluid analysis, cytology +/- culture and sensitivity (if evidence of inflammatory cells) recommended. Pending effusion analysis as well as ACTH stimulation test, the possibility of occult infiltrative gastrointestinal neoplasia (given the thin body condition and gastrointestinal signs) cannot be definitively excluded.

DATE

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A GI panel to include PLI, TLI, cobalamin and folate could also be considered. A coagulation panel is suggested if hemorrhagic effusion is confirmed. Concern for potential diffuse intraabdominal neoplastic process such as sarcomatosis or similar (given the unspecified free floating nodule and if blood tinged effusion is confirmed) is warranted, although not definitive. Very guarded prognosis.



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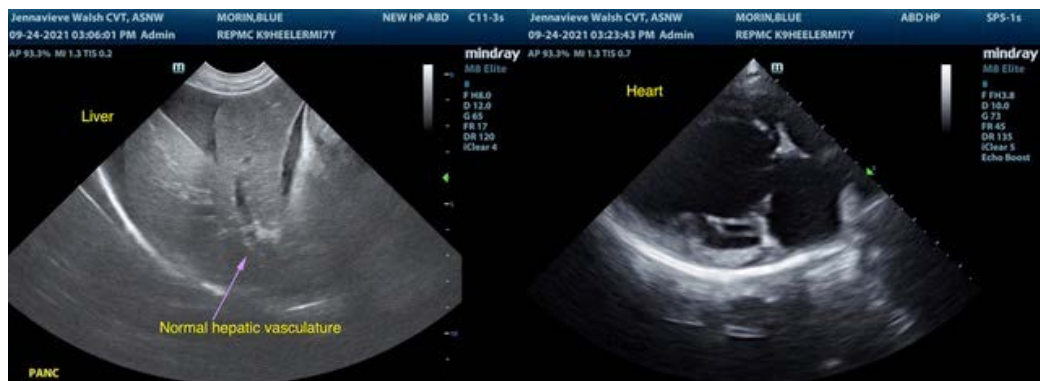
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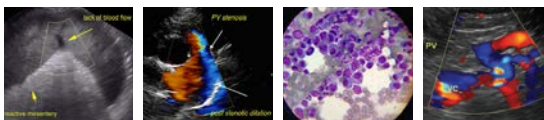
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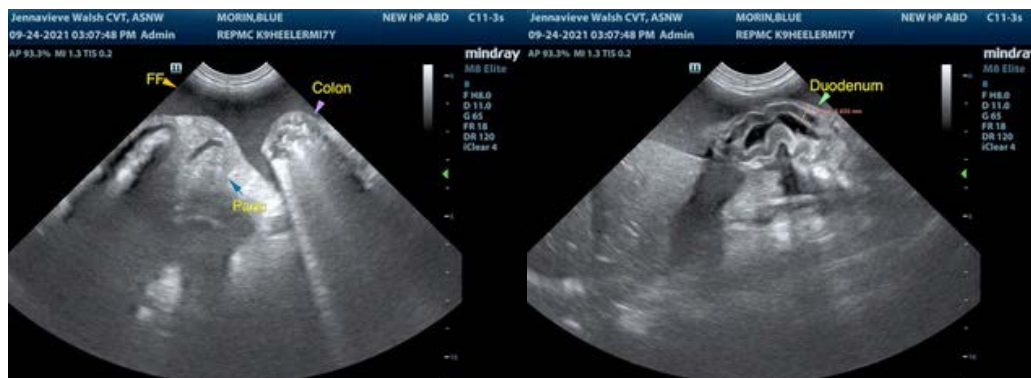
Intact Male

AGE

7 Years

WEIGHT

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The information and recommendations provided are based on the images presented by the referring veterinarian. 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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