



PATIENT PRESENTING CLINICAL SIGNS

Nova Pagan History: Acute bloody vomiting, hematochezia, erythema, facial swelling, vaginal bleeding. Medication: Cerenia, ondazsetron, pantopryazole, metronidazole, buprenex, ampicillin, IVF

SPECIES ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Canine **Urinary System**

BREED

French Bulldog

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 were noted.

SEX

Female

The area of the aortic trifurcation was free of pathology.

AGE

2020

Normal size and margination was 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 5.0 cm in length.

Adrenal Glands

WEIGHT

26.4 Pounds

The left adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 2.4 cm length x 0.66 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 2.6 cm length x 0.60 cm width at the caudal pole.

INTERPRETED BY

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

Spleen

The spleen was mildly subnormal in size, potentially consistent with mild splenic volume contraction, 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

Rebekah Jakum, CVT
ARDMS/RVT

Liver

The liver presented normal in size. The hepatic parenchyma revealed diffuse reduced echogenicity compared to the spleen and renal cortical parenchyma with a mild coarse echotexture. 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.

HOSPITAL NAME

Maple Hills VH

REFERRING VET

Dr. Banzhof

The gallbladder was non-distended in size with primarily anechoic luminal content. The cystic and common bile ducts were normal.

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Gastrointestinal

The stomach presented mild to moderate wall thickening secondary to echogenic mucosa hypertrophy. Intact wall layering was maintained and distinct. Moderate to marked gastric distension with retained anechoic fluid was present yet without evidence of mechanical pyloric outflow obstruction or gastric foreign material. The pylorus wall measured 0.5 cm.

DATE

10/19/22



PATIENT

Nova Pagan

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 ileus pattern consisting of mild fluid accumulation in the intestinal lumen was present. Segmental duodenojejunal corrugation was noted without evidence of mechanical obstructive criteria or foreign material. The duodenum wall measured 0.40 cm. The jejunum wall measured 0.30 cm.

SPECIES

Canine

The colon walls presented intact yet moderate prominent wall layering with mild thickened to echogenic submucosa. Non-formed to liquid fecal matter was present in the colon lumen with lumen dilation. The descending colon and colorectum were primary empty with minimal non-formed fecal matter present.

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Pancreas

The pancreas base and right pancreatic limb exhibited subtle prominent size with subtle capsule asymmetry and minor hypoechoic to non-homogenous parenchyma compared to adjacent omentum.

SEX

Female

Free Abdomen

Intermittent, mildly prominent to enlarged mesenteric nodes were present. The lymph nodes were essentially isoechoic to adjacent omentum without evidence of peripheral inflammation and maintaining a normal width: length ratio (<0.5).

AGE

2020

Intermittent small pocket of scant anechoic free fluid was noted. Mild perienterocolic and periuterine reactive mesentery was noted.

WEIGHT

26.4 Pounds

Other

The uterus exhibited variable thickening most notable in focal areas of the left and right uterine horn, exhibiting mild non-homogenous uterine tissue echogenicity and with minor segmental anechoic luminal fluid present in the left uterine horn. The uterine body measured 1.3 cm in diameter, while a focal areas of the left uterine horn measured up to 2.1 cm in diameter. No overt pathology in the area of the left or right ovaries.

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ULTRASONOGRAPHIC FINDINGS

IMAGING

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Rebekah Jakum, CVT
 ARDMS/RVT

- Variably thickened uterus, exhibiting mild segmental anechoic luminal fluid- nonspecific, endometritis, potential for resorbing fetuses if recently bred, possible emerging pyometra are all potentials.
- Acute gastroenterocolitis pattern with moderate to marked hypomotile gastritis and nonobstructive segmental small bowel corrugation
- Acute hepatopathy- potential acute primary versus secondary hepatitis, reactive hepatopathy, or less likely occult neoplasia
- Mildly prominent to hypoechoic pancreas- possible concurrent low-grade inflammation versus reactive pancreatic changes
- Intermittent small pockets of scant peritoneal free fluid and minor subjective benign/reactive mesenteric lymphadenopathy

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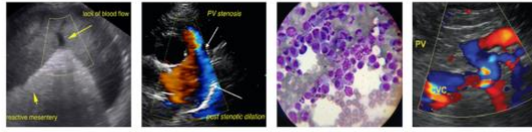
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INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS



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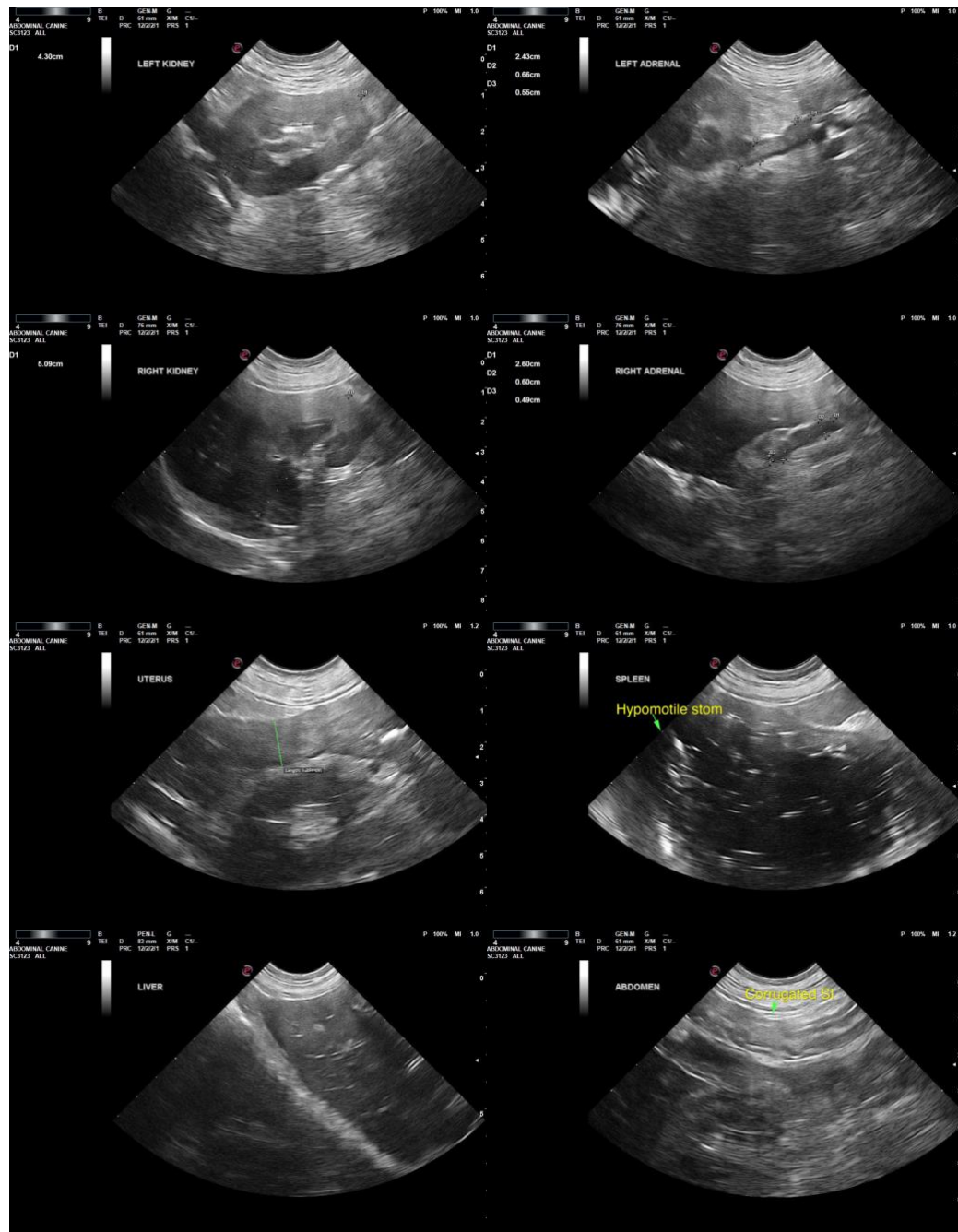
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In light of current clinical status of the patient, hospitalization with aggressive therapy for acute hemorrhagic diarrhea syndrome/hemorrhagic gastroenteritis, which may include current IV fluids +/- plasma expanders, broad spectrum antibiotics, gastroprotectants, as well as hepatosupportive medications and assessment of clinical response over the next 24-48 hours is recommended. Sonographic reassessment of the gastrointestinal tract and colon, as well as the uterus may be considered n 48-72 hours pending clinical response or sooner if evidence of progressive vaginal discharge or nonresponse to empirical therapy. Continued monitoring of CBC for evidence of progressive inflammatory changes and/or sepsis is suggested.





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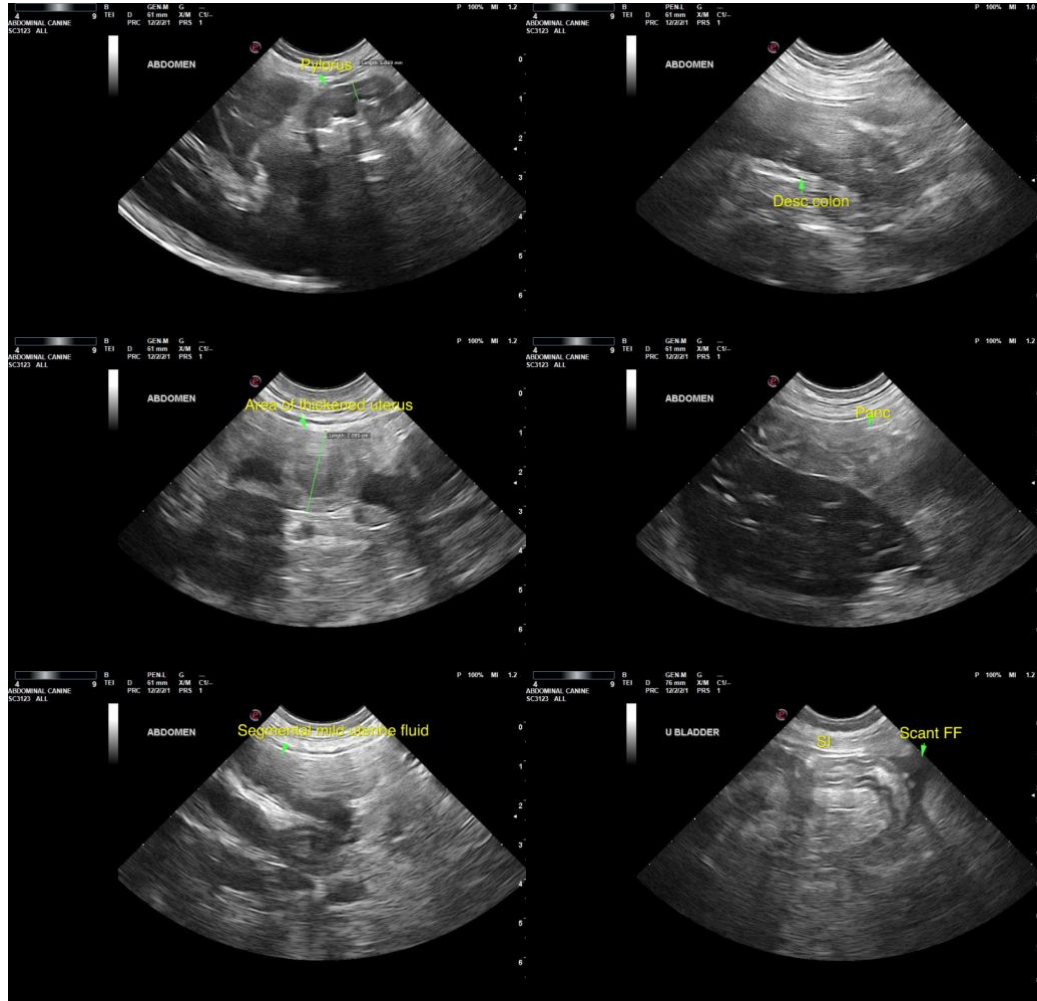
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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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