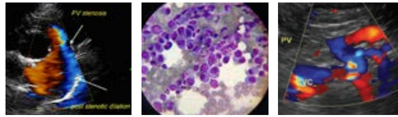


SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
1-800-838-4268 info@sonopath.com SonoPath.com

DATE

9/1/22

PATIENT

Cocoa Milich

SPECIES

Canine

BREED

Labrador Retriever X

SEX

Spayed Female

AGE

1/28/19

WEIGHT

44.4 Pounds

INTERPRETED BY

Kathleen Sennello DVM, MS, Diplomate ACVIM (Small Animal Internal Medicine)

IMAGING PERFORMED BY

Andi Parkinson RDMS

HOSPITAL NAME

Animal Emergency Hospital

REFERRING VET

Dr. Goessling

INVOICE

40947

PRESENTING CLINICAL SIGNS

Patient started vomiting Sunday morning. Diarrhea started yesterday and now diarrhea looks like straight blood. Patient is lethargic. Owner currently lives with parents while moving and patient has access to outdoor space unsupervised. She was seen by RDVM yesterday and got SQ fluids and cerenia. She is not vomiting any more but not eating. Was sent home on metronidazole and proviable kit. got metro this morning, proviable paste this afternoon.

Current Medications: omerapozole, maroitant, ondanestron, metocloperamide , buprenorphine, metronidazole.
Lab Results: See attached.
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder is moderately distended with anechoic urine. The Bladder wall, trigone, ureteral papillae and visible urethra (to a depth of 2cm) appear normal with no evidence of wall thickening, mucosal irregularities, masses or cystic calculi.

The left kidney has a normal shape and size (5.96 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of focal perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The right kidney has a normal shape and size (6.37 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of focal perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

Adrenal Glands

The left adrenal gland is normal in size measuring 0.68 cm at the caudal pole. It is observed in its normal position cranial to the left renal artery. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

The right adrenal gland is normal in size measuring 0.70 cm at the caudal pole. It is observed in its normal position between the cranial aspect of the right kidney and the caudal vena cava. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

Spleen

The spleen is subjectively normal in size. The spleen echotexture is heterogenous and mildly mottled, the splenic capsule is smooth with no irregularities. The blood flow through the hilus and splenic parenchyma appears normal. No focal parenchymal abnormalities are visualized.

Liver

The liver is subjectively normal in size, and echogenicity with smooth peripheral margins. The parenchyma is homogenous echotexture. The visible portions of the vasculature and biliary tract appear normal. No focal nodules or cystic lesions are observed.

The gall bladder lumen is moderately distended. The wall of the gall bladder is not thickened and has a smooth mucosal surface. There is a moderate amount of non-organized echogenic debris. The cystic and common bile ducts are normal/not visible.

Gastrointestinal

The stomach contains moderate fluid and gas. It measures at a normal thickness of <0.7cm with some variability due to the presence of rugal folds. The distinction of the gastric wall layers is adequate and there is no impression of reduced peristaltic activity. No masses or focal lesions were observed.

The visualized areas of duodenum, jejunum and ileum have a relatively uniform diameter with minimal fluid distension. Wall thickness is normal. Bowel loops follow a curvilinear path with distinct wall layering maintaining the typical 1:3 muscularis:mucosa layer ratio. Jejunum wall measures 0.28 cm. Visualized peristalsis appears appropriate. There were no focal lesions consistent with obstruction or a mass effect observed.

The ileocecal junction was visualized and exhibited normal intact wall layering and is subjectively of normal thickness. Sections of colon are visualized with formed fecal material and gas shadowing distally. The distal colon appears mildly thickened, measuring at 0.33 cm with intact layering.

Pancreas

The pancreas is normal and isoechoic to surrounding mesentery. There is no evidence of nodules or cystic lesions. There is no evidence of regional mesenteric inflammation or fluid.

Free Abdomen

Evaluation of the peritoneal cavity did not reveal any evidence of effusion, or subjective lymphadenomegaly. The Medial iliac nodes appear normal and there was no evidence of a caudal aortic thrombus at the bifurcation. The omentum is of normal uniform echogenicity.

ULTRASONOGRAPHIC FINDINGS

- Mildly mottled spleen – The diffuse splenic changes are non-specific and could be consistent with lymphoid hyperplasia, extramedullary hematopoiesis, infiltrative neoplasia, inflammation, other. Cytology or histopathology would be necessary to get a definitive diagnosis.

- Moderate gallbladder debris – The significance of the aggregated gallbladder debris is unclear. This could represent an early mucocele, cholestasis, or may be secondary to fasting but seems unlikely to be causing a current issue. Recommend continued monitoring.

- Moderate amount of fluid visualized within the gastric lumen – Correlate with feeding history. If the patient was adequately fasted, correlate with abdominal radiographs and consider such differentials as delayed gastric emptying, ingested foreign material, or partial outflow tract obstruction (none observed).

- Prominent/mildly thickened colonic wall – most consistent with inflammation, infection, or edema.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The ultrasound changes observed were relatively mild. Unfortunately, the severity of ultrasonographic changes do not always correlate with the severity of Gi symptoms exhibited. Many causes for Gi signs cannot be definitively diagnosed by ultrasound alone.

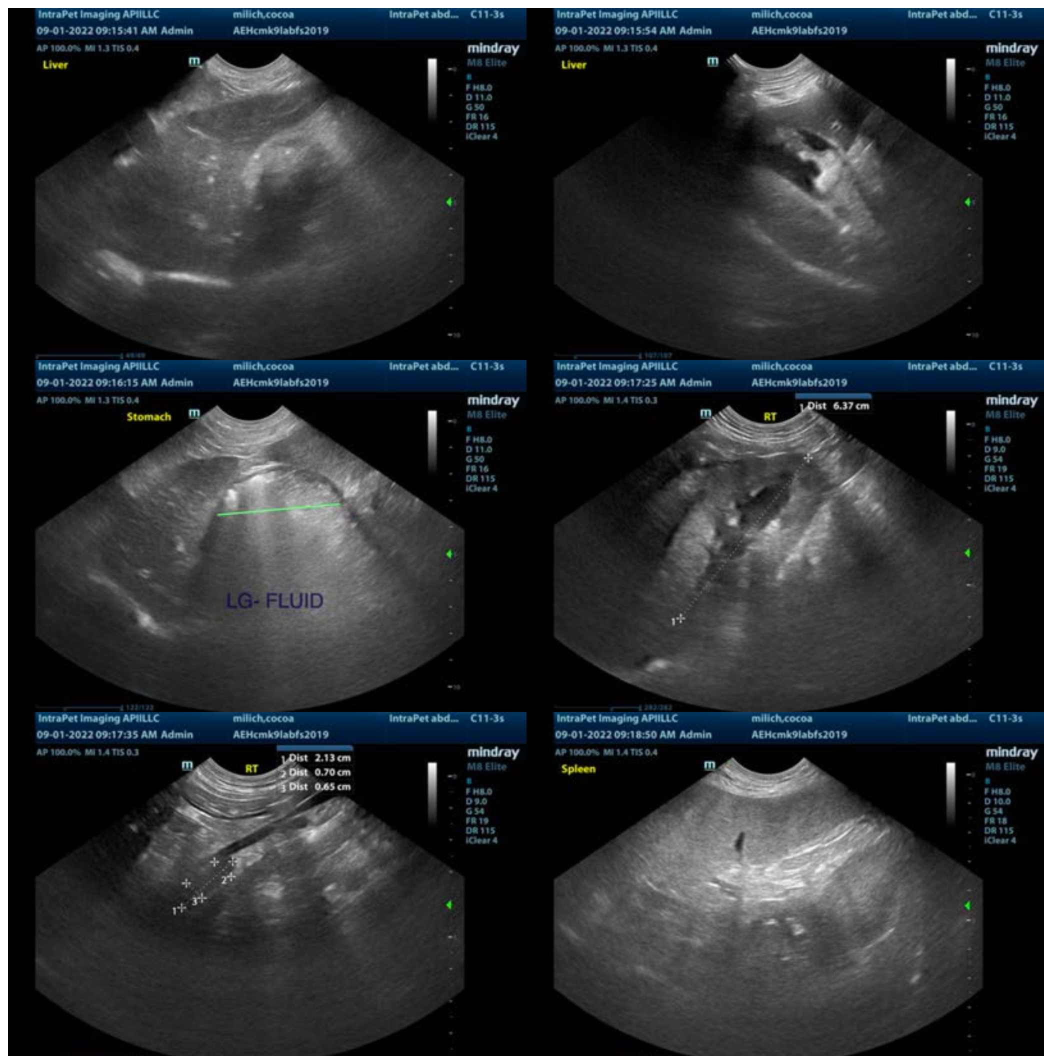
- Consider metabolic causes based on bloodwork, ACTH stim results, Liver function testing, Gi panel (TLI/PLI, folate, cobalamin.) (if not already done)

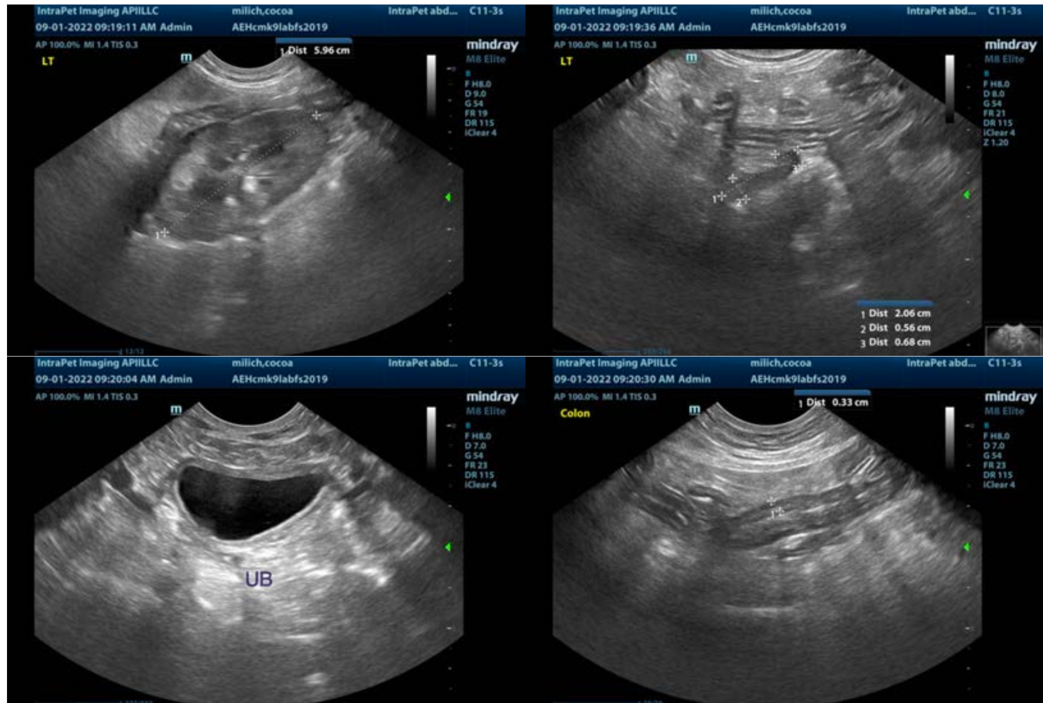
- Consider primary GI causes: Gi parasitism, dietary indiscretion, mild pancreatitis, bacterial dysbiosis, food allergy, IBD and less likely intestinal neoplasia.

If primary GI disease is suspected in young patients with acute signs, I would most strongly consider dietary indiscretion, ingestion of foreign material, Gi parasitism, Addison's disease and pancreatitis, acute colitis/gastroenteritis. Serial radiographs for evaluation of progressive obstruction/partial obstruction/foreign material is warranted. A focal obstruction was not visualized on today's exam but cannot be definitively ruled out.

Recommend symptomatic therapy and close monitoring, if symptoms persist, re-evaluate, and consider surgery/endoscopy to obtain biopsies and evaluate for foreign material.

Additionally, there are mild liver enzyme elevations with no focal lesions. As discussed above, you could consider a liver function test +/- Leptospirosis screening.





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.

Kathleen Sennello DVM,MS, Diplomate ACVIM (Small animal Internal Medicine)
kathleen.sennello@sonopath.com