

IMAGING PERFORMED BY

IntraPet.com



SonoPath

Clinical Sonography & Telectology

EDUCATIONAL TELECONSULTATION SERVICES™

1-800-838-4268 info@sonopath.com SonoPath.com

DATE PRESENTING CLINICAL SIGNS

10/21/22 Diarrhea that is not responding to medication. Stool was soft then became liquid. Multiple swollen lymph nodes.

PATIENT

Millie Weiner Current Medications: Metronidazole 250mg BID for 5 days, Provable BID for 7 days.
Lab Results: See attached.

SPECIES

Canine

BREED

Hound X

SEX

Spayed Female

AGE

9/2/17

WEIGHT

31.3 Pounds

INTERPRETED BY

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

IMAGING PERFORMED BY

Andi Parkinson RDMS

HOSPITAL NAME

Padonia Vet Hospital

REFERRING VET

Dr. Youssef

INVOICE

42230

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 (5.75 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 (4.95 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 0.51 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 0.57 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, echotexture is homogenous, and 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 minimal luminal contents. 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 0.33 cm. Visualized peristalsis appears appropriate. There is a focal section of small intestine that appears somewhat corrugated and thickened. This area retains wall layering and is most consistent with a focal area of enteritis/irritation.

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. There is no observed focal or generalized colon wall thickening or loss of 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. There is a significant mesenteric lymphadenopathy present with enlarged, rounded, hypoechoic nodes. One such lymph node deep in the cranial abdomen measures 1.52 cm x 4.72 cm. Another measures 1.55 cm x 1.35 cm. There is a cluster of lymph nodes near the mesenteric root, one of which has a diameter of 1.2 cm and another that has a diameter of 0.89 cm. The mesentery is hyperechoic around these lymph nodes.

ULTRASONOGRAPHIC FINDINGS

- 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.
- Mesenteric lymphadenopathy – The moderate mesenteric lymphadenopathy is most concerning for a neoplastic process, although you can see significant lymphadenopathy in some cases of autoimmune/inflammatory disease, infectious disease (tick born disease—such as bartonella, fungal infections, FIP (cats)) etc. A fine needle aspirate with cytology is recommended for further evaluation.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

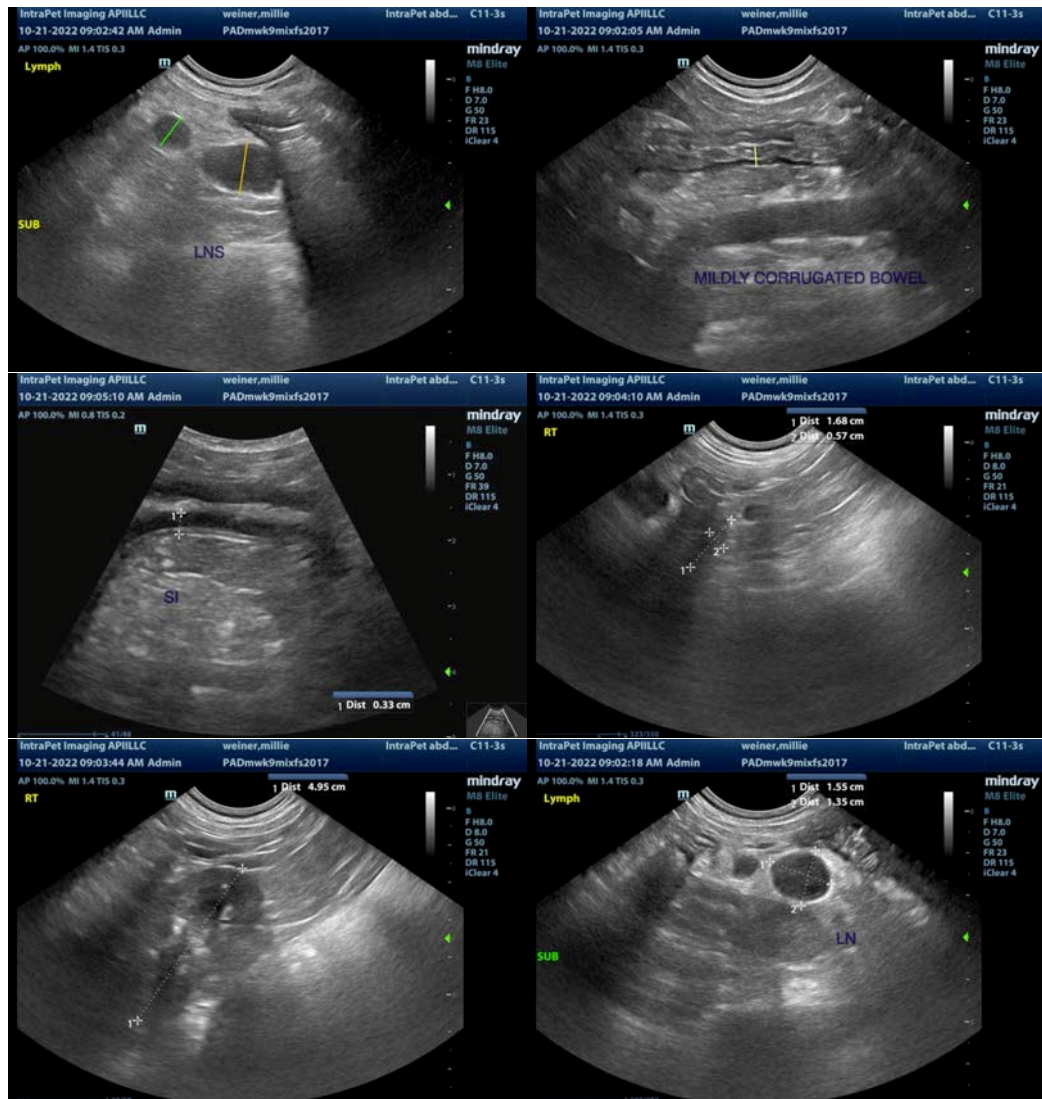
Today's scan is relatively normal aside from the prominent hypoechoic and enlarged lymph nodes. Ideally, these would be sampled. Many of the observed lymph nodes are either too deep or under an organ, etc. Careful evaluation for the ability to reach any of these lymph nodes for sampling is warranted. Of primary concern would be round cell neoplasia, although severely reactive lymph nodes or fungal infection, etc. is possible. If a diagnosis cannot be obtained cytologically from a lymph node, you could consider a fine needle aspirate of the liver or spleen, even though they appear ultrasonographically normal.

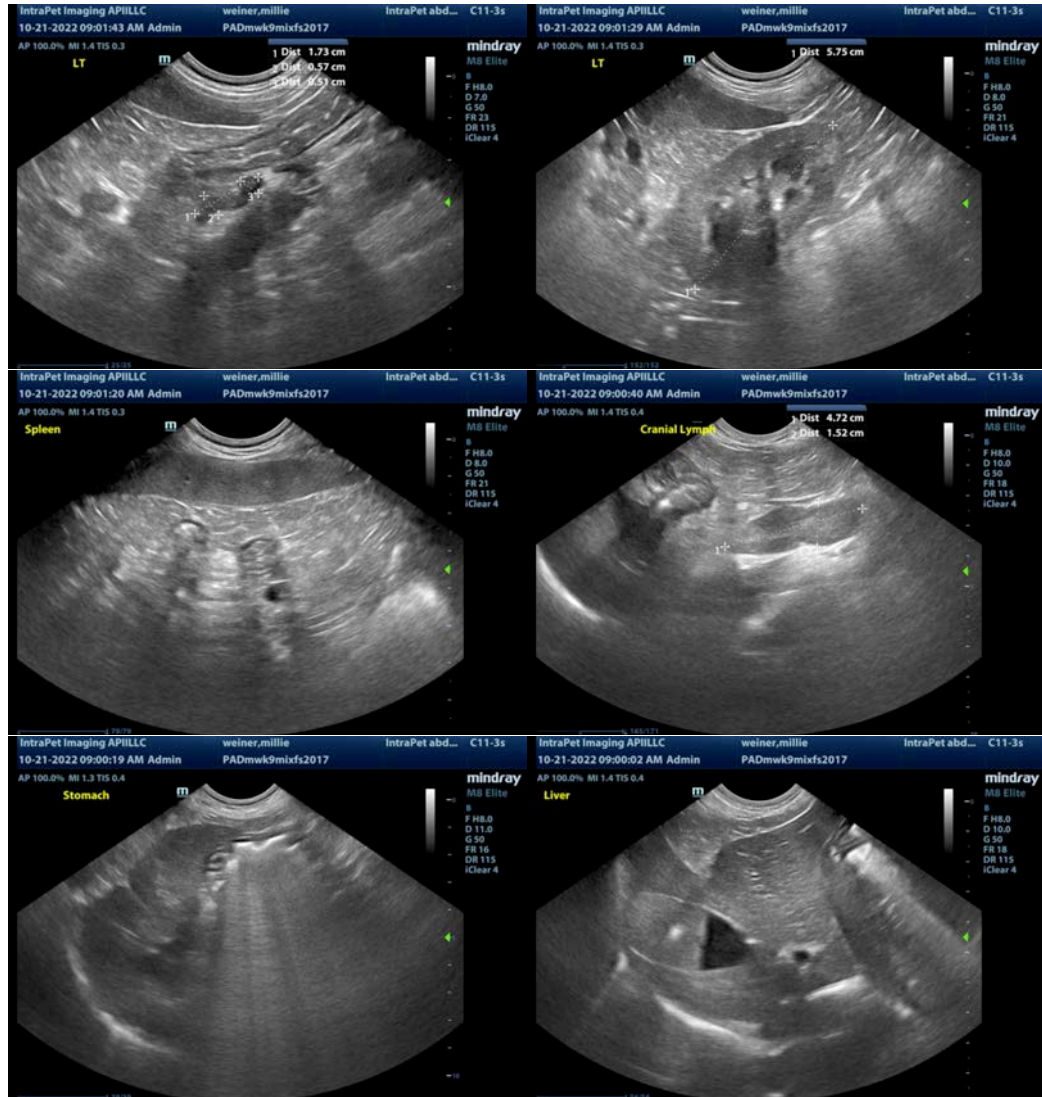
Beyond that, options are either surgical biopsies or continued symptomatic treatment for the diarrhea (novel protein/hydrolyzed protein prescription diet, chronic probiotic therapy, etc.) and reevaluation of the abdomen in 2-4 weeks (sooner if the patient is declining) to see if there is evidence of progression.

There is a significant lymphocytosis on the submitted lab work. Consider a pathologist review of the CBC to look for evidence of atypical lymphocytes.

Additionally consider submitting a biopsy of an enlarged peripheral lymph node if cytologic sampling is not diagnostic. (Ideally not submandibular).

Recommend three view thoracic radiographs to evaluate for possible concurrent thoracic disease/involvement.





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