

**DATE PRESENTING CLINICAL SIGNS**

10/25/2021

History: Diarrhea for several weeks. No blood. Lethargic. Eating less. Weight loss 7.6lbs since August. Abdomen tender on palpation. No palpable mass.

PATIENT

Ellie Eriksson

Current Medications: Metronidazole 125mg/ml 0.7 ml BID Fortiflora 1 pack daily sprinkled on food.

Lab Results: Borderline anemia and hypoalbuminemia. Panhypoproteinemia.

Date of Previous IntraPet Ultrasound: No previous IntraPet scans.

Sedation: Not needed.

Stat Report: Not requested.

SPECIES

Canine

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**BREED**

Cairn Terrier

Urinary System

The urinary bladder, trigone, and pelvic urethra are normal in thickness and the mucosal surface is smooth. The bladder lumen is moderately distended with mostly anechoic urine. No masses, inflammatory changes or calculi are observed. Ureteral papillae and visualized portion of the proximal urethra, visible to a depth of 2 cm, are normal.

SEX

Female, spayed

The left kidney is normal size (5.28 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with normal corticomedullary distinction. A hyperechoic medullary band is visualized adjacent to the corticomedullary junction. Mild pyelectasia is present (0.23 cm in the transverse plane). There is no evidence of nephroliths, infarcts or hydroureter. Renal vasculature is normal.

AGE

12/31/2015

The right kidney is normal size (5.05 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with normal corticomedullary distinction. A hyperechoic medullary band is visualized adjacent to the corticomedullary junction. Trace pyelectasia is present. There is no evidence of nephroliths, infarcts or hydroureter. Renal vasculature is normal.

WEIGHT

18.5 lbs.

INTERPRETED BY

Andrea Nicastro, DVM,
Diplomate ACVIM
(Small Animal Internal
Medicine)

Adrenal Glands

The left adrenal gland is normal size (0.49 cm at cranial pole) (0.57 cm at caudal pole) (2.39 cm in length); normal shape; homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

HOSPITAL NAME

Glen Burnie AH

The right adrenal gland is normal size (0.45 cm at cranial pole) (0.56 cm at caudal pole) (2.60 cm in length); normal shape; homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

REFERRING VET

Dr. Shah

Spleen

The spleen is normal in size (1.34 cm in width at the level of the hilus) with a normal capsular contour. There is appropriate echogenicity and echotexture. No focal lesions are observed. Splenic vasculature is normal.

INVOICE

12418

Liver

The liver is subjectively normal in size with normal contours and structure. There is appropriate echogenicity and echotexture. No overt structural evidence of inflammatory, infiltrative or regenerative pathology is evident. Vascular and biliary tracts are of normal volume with no evidence of congestion. No pathological hepatic lymphadenopathy observed. The gall bladder lumen is moderately distended. The wall is thin and smooth. A scant amount of suspended echogenic debris is observed within the lumen. The cystic and common bile ducts are normal/not seen.

Gastrointestinal

The stomach and intestine are free of stasis and exhibit normal peristaltic activity. The gastric lumen is not distended. The gastric wall and pylorus are normal in thickness with a normal layering pattern. The pyloric outflow tract is patent. The small intestinal lumen is segmentally dilated with gas and chyme. The small intestinal wall is normal to mildly thickened (up to 0.39 cm) with a normal layering pattern and appropriate mural detail. There is slight disruption in the normal 1:3 muscularis: mucosal ratio in some segments. Discreet masses are not identified. The ileocecal colic junction is normal. A focal area of descending colonic wall (at the level of the urinary bladder) is mildly thickened (up to 0.52 cm) with retention of the normal layering pattern. The remaining colonic wall is normal in thickness. No obstructive disease is noted.

Pancreas

The region of the pancreas is isoechoic relative to surrounding omental fat. No obvious parenchymal abnormalities are observed. There is no evidence of regional inflammation or effusion.

Free Abdomen

The mesentery throughout the abdomen is hyperechoic, particularly in the right cranial quadrant. Trace free fluid is observed. A few prominent mesenteric lymph nodes are visualized, the largest measuring 3.43 cm in length.

ULTRASONOGRAPHIC FINDINGS

Primary Findings:

- The clinical history and sonographic changes are most consistent with a protein-losing enteropathy (i.e., inflammatory bowel disease, lymphangiectasia, infectious/parasitic disease, lymphoma). However, concurrent causes of hypoalbuminemia cannot be completely excluded.
- The prominent abdominal lymph nodes are most consistent with reactive lymphadenitis or lymphoid hyperplasia. Neoplastic infiltration is considered less likely.
- Diffuse peritonitis likely secondary to bowel pathology.

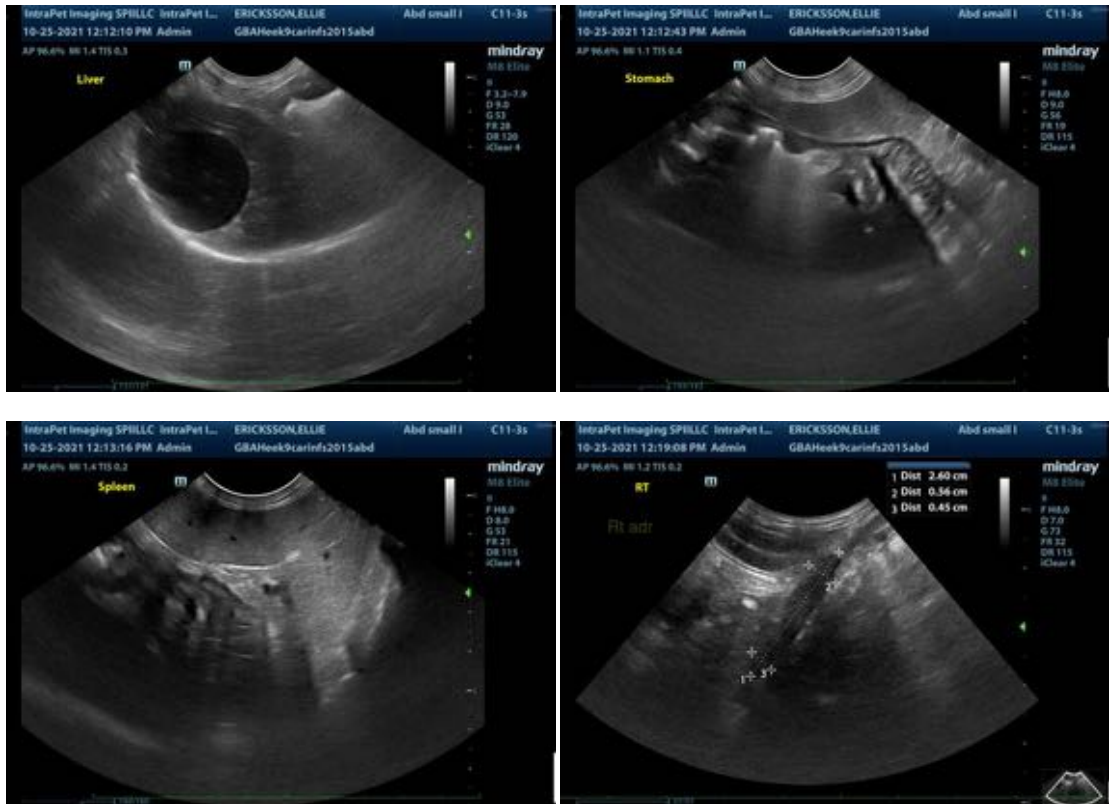
Secondary Findings:

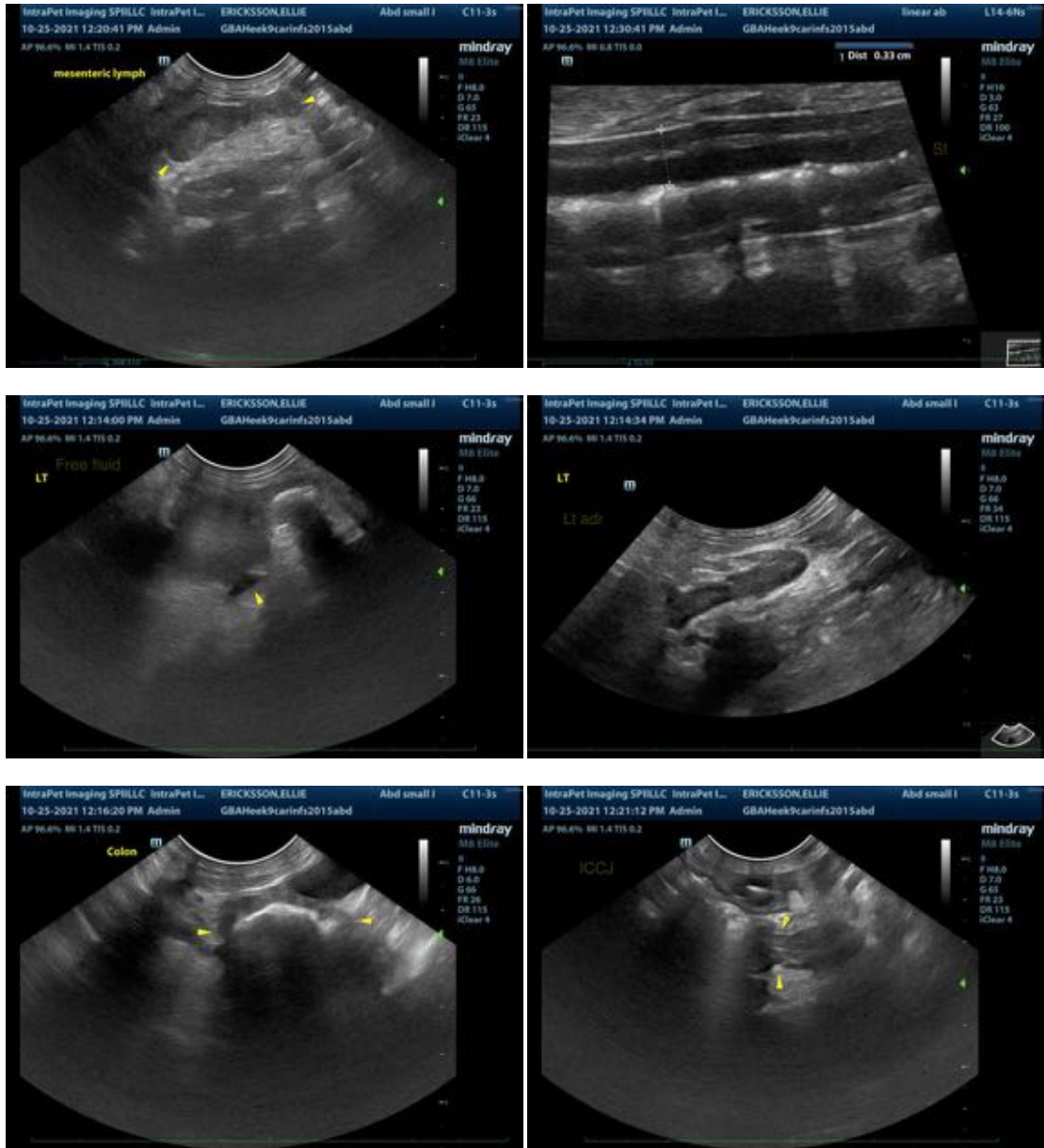
- The bilateral renal medullary bands may represent a benign incidental finding. Alternatively, subclinical renal disease may be present. The bilateral pyelectasia could be consistent with pyelonephritis, fluid therapy (if applicable), other.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- To further evaluate for a protein-losing enteropathy, consider the following:
 1. GI panel including serum cobalamin, folate, TLI and PLI.
 2. A fecal evaluation for ova/Giardia
 3. Prophylactic deworming with Fenbendazole at 50 mg/kg once a day for 5 days is recommended. Repeat above protocol in 3 weeks.
 4. 6-week limited antigen diet trial.

5. Gastrointestinal biopsies, preferably surgical so as to be able to access all areas of bowel.
- To further assess for concurrent causes of hypoalbuminemia, consider the following:
 1. A resting cortisol level to screen for hypoadrenocorticism. If resting cortisol level is < 2.0 mcg/dL, an ACTH stimulation test is recommended
 2. Pre and post-prandial serum bile acids.
 3. UPC
 - Given the severe hypoalbuminemia, three-view thoracic radiographs are recommended to assess for pleural effusion.





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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