



PATIENT PRESENTING CLINICAL SIGNS

Bella Byrd
The patient has had 2 months history of vomiting but still eating ok. Minimal weight loss. Bloodwork 8/23 albumin 2.6, BUN 64, creatinine 1.3. Leukocytosis with a mature neutrophilia, thrombocytosis, normal hematocrit, normal PSL, USG 1.016. No proteinuria. Some hematuria. 4DX negative. The patient is also regurgitating.

SPECIES

Canine

BREED

Maltese

SEX

Female, spayed

AGE

15 Yrs

WEIGHT

7 lbs.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder wall is normal in thickness and the mucosal surface is smooth. The bladder lumen is moderately distended with anechoic urine. No masses, inflammatory changes or calculi are observed. The region of the trigone and the visible portion of the proximal urethra are normal.

The left kidney is normal size (2.81 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with mild loss of corticomedullary distinction. Hyperechoic shadowing diverticular foci are visualized. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The right kidney is normal size (2.77 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with mild loss of corticomedullary distinction. Hyperechoic shadowing diverticular foci are visualized. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

INTERPRETED BY

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

Adrenal Glands

The left adrenal gland is normal size (0.43 cm at cranial pole) (0.46 cm at caudal pole); 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.

IMAGING PERFORMED BY

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

The right adrenal gland is normal size (0.59 cm at cranial pole) (0.33 cm at caudal pole); 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

Sun Dog Cat Moon

Spleen

The spleen is subjectively normal in size (0.80 cm in width at the level of the hilus) with normal curvilinear peripheral contours. The parenchyma is subjectively hypoechoic and slightly mottled in appearance. A 0.46 cm hypoechoic nodule is observed approximately mid-spleen, at the lateral aspect. Irregular myelolipomas are also observed in the region of the hilus. Splenic vasculature appears normal with no evidence of thrombosis.

REFERRING VET

Dr. Kelsey Pruitt

Liver

INVOICE

14004

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

DATE

9/21/22



PATIENT

Bella Byrd

SPECIES

Canine

BREED

Maltese

SEX

Female, spayed

AGE

15 Yrs

WEIGHT

7 lbs.

INTERPRETED BY

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

**IMAGING
PERFORMED BY**

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

HOSPITAL NAME

Sun Dog Cat Moon

REFERRING VET

Dr. Kelsey Pruitt

INVOICE

14004

DATE
9/21/22

distended. The wall is thin and smooth. A small amount of mineralized sand +/- tiny choleliths is observed within the lumen. The cystic and common bile ducts are normal/not seen.

Gastrointestinal

The gastric lumen is moderately distended with ingesta. The gastric wall in the region of the fundus is normal in thickness with a normal layering pattern. In the region of the pylorus, the wall is thickened (up to 0.97 cm) with retention of the normal layering pattern. The pyloric outflow tract appears patent. The small intestinal lumen is not dilated. The small intestinal wall is diffusely thickened (up to 0.40 cm) with retention of the normal layering pattern. There is evidence of mucosal striations in several segments. Discreet masses are not identified. The colonic wall is normal. The colonic lumen contains shadowing fecal material. No obstructive disease is noted although a partial gastric outflow tract obstruction due to pyloric thickening cannot be completely excluded.

Pancreas

The right limb of the pancreas is visible/prominent with minimal deviation from the normal peripheral contours. The parenchyma is mildly hypoechoic relative to surrounding omental fat and subtly mottled in appearance. No distinct focal lesions are observed. The pancreatic duct is not overtly dilated.

Free Abdomen

The mesentery in the right cranial quadrant is mildly hyperechoic. The abdominal lymph nodes are normal/not visible.

Other

A brief echocardiogram reveals no evidence of pericardial effusion or obvious right atrial/auricular mass.

ULTRASONOGRAPHIC FINDINGS

Primary Findings:

- The pyloric wall thickening could be consistent with inflammation, hypertrophy or emerging neoplasia (i.e., lymphoma).
- The diffuse small intestinal wall changes, in conjunction with the patient's history of hypoalbuminemia, is suggestive of a protein losing enteropathy. Top differentials include inflammatory bowel disease, lymphangiectasia, emerging neoplasia (i.e., lymphoma), infectious/parasitic disease.
- The pancreatic changes in the right limb could be consistent with mild chronic +/- active pancreatitis.
- Right cranial peritonitis, likely secondary to bowel and/or pancreatic pathology.

Secondary Findings:

- Bilateral degenerative renal changes with dystrophic mineralization.
- The splenic parenchymal changes, including the nodule trend toward the benign (i.e., lymphoid



PATIENT

Bella Byrd

SPECIES

Canine

BREED

Maltese

SEX

Female, spayed

AGE

15 Yrs

WEIGHT

7 lbs.

hyperplasia, extramedullary hematopoiesis). However, emerging neoplasia cannot be completely excluded.

- Mineralized gallbladder sand +/- small choleliths - incidental.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- Fecal evaluation for ova and Giardia.
- Malabsorption panel including serum cobalamin, folate, TLI and PLI.
- GI biopsies (i.e., endoscopic or surgical) would be warranted to get a definitive diagnosis. Surgical biopsies would be ideal in that they are more likely to be representative of the underlying GI pathology.
- With regard to the regurgitation, three-view thoracic radiographs are recommended to assess for esophageal disease. In the meantime, initiation of empirical treatment for esophagitis/gastritis is recommended including antiemetics, antacids and sucralfate.
- Other considerations include the following:
 1. Repeat bloodwork including a CBC chemistry panel, urinalysis and T4
 2. To further assess for possible causes of hypoalbuminemia, consider a resting cortisol level (to screen for hypoadrenocorticism) and pre- and post-prandial serum bile acids (to assess for hepatic dysfunction).

INTERPRETED BY

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

IMAGING PERFORMED BY

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

HOSPITAL NAME

Sun Dog Cat Moon

REFERRING VET

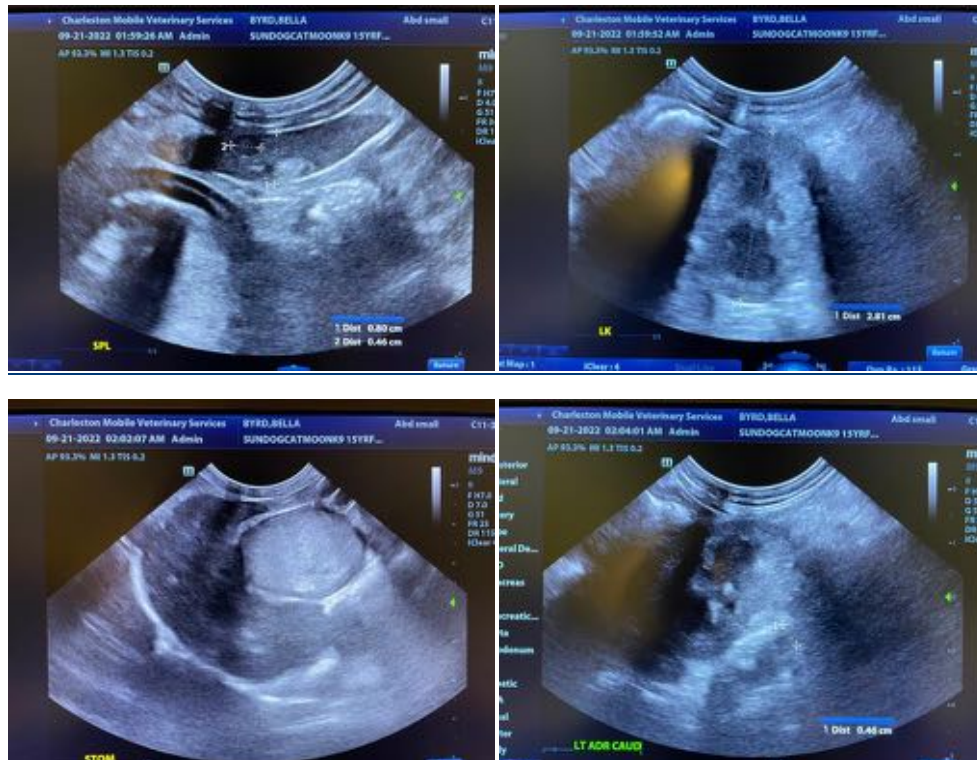
Dr. Kelsey Pruitt

INVOICE

14004

DATE

9/21/22





PATIENT

Bella Byrd

SPECIES

Canine

BREED

Maltese

SEX

Female, spayed

AGE

15 Yrs

WEIGHT

7 lbs.

INTERPRETED BY

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

IMAGING PERFORMED BY

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

HOSPITAL NAME

Sun Dog Cat Moon

REFERRING VET

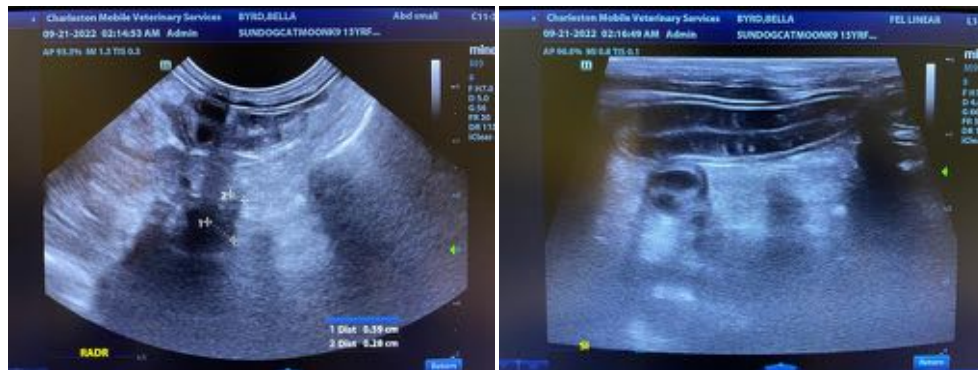
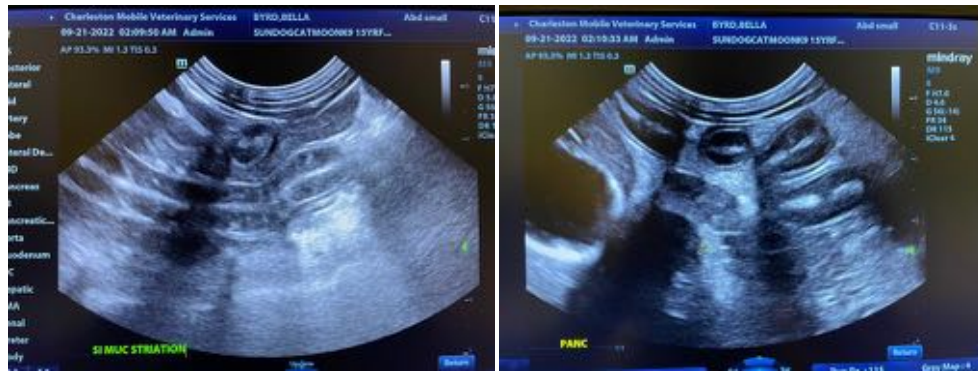
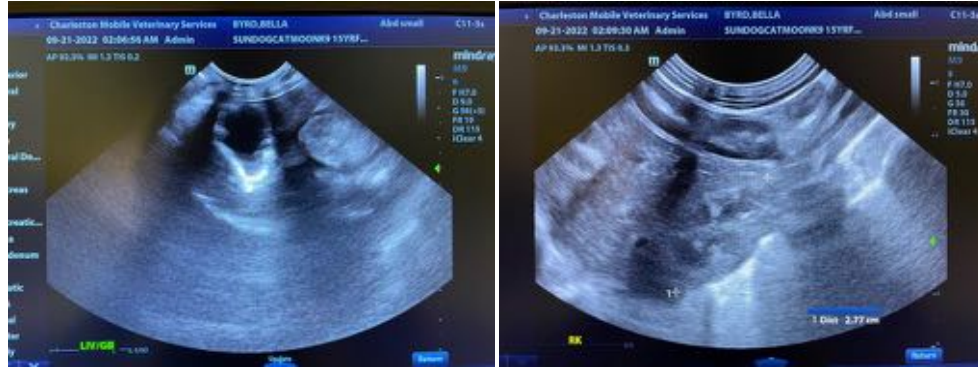
Dr. Kelsey Pruitt

INVOICE

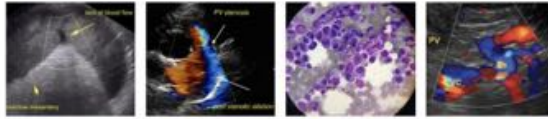
14004

DATE

9/21/22



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



PATIENT in the image/video clips provided.

Bella Byrd 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.

SPECIES

Canine Andrea Nicastro, MPH, DVM, Diplomate DACVIM (Small Animal Internal Medicine)
info@SonoPath.com

BREED

Maltese

SEX

Female, spayed

AGE

15 Yrs

WEIGHT

7 lbs.

INTERPRETED BY

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

**IMAGING
PERFORMED BY**

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

HOSPITAL NAME

Sun Dog Cat Moon

REFERRING VET

Dr. Kelsey Pruitt

INVOICE

14004

DATE

9/21/22