


PATIENT

Addie Lethin

SPECIES

Canine

BREED

Golden Retriever

SEX

FS

AGE

13 years

WEIGHT

32 kg.

INTERPRETED BY

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

IMAGING PERFORMED BY

Patti Mayfield DVM

HOSPITAL NAME

Sunriver VC

REFERRING VET

Emily Kent DVM

INVOICE

16572

DATE

4/11/23

PRESENTING CLINICAL SIGNS

Patient presented on 4/6/2023 for evaluation of ~ 2 weeks duration of hyporexia, decreased stool production, and lethargy. Current meds & supplements: -- Cranberry supplement -- Glucosamine -- Ostifen 100 mg: 1/2 tab PO BID Current treatments: -- Patient was started on Clavamox following blood work/UA results

Abnormal PE/Chem/CBC/UA Results: PE: -- evidence of weight loss with epaxial muscle wasting and very limited ROM of the pelvic limbs. Mucous membranes are light pink. Cranial abdomen is slightly firm, no palpable masses, but suspect ascites. Abdominal and thoracic radiographs (4/6/23): -- no abnormalities noted on thoracic rads. There is a mild loss of serosal detail noted in the cranial abdomen. No overt masses seen. FAST US (4/6/23): -- Ascites in caudal abdomen. No obvious splenic mass -- US-guided FNA of ascites; straw colored FLUID ANALYSIS WITH CYTOLOGY: -- Modified transudate -- Protein: 3.5 g/dL -- <100,000 RBC/uL -- 1570 nucleated cells/uL PATHOLOGY REPORT: -- This is a modified transudate (high protein transudate). This type of fluid forms most commonly as a result of increased hydrostatic pressure, often portal hypertension. The underlying cause is not evident, but possible etiologies include congestive cardiac failure, liver disease, impaired lymphatic drainage (e.g., secondary to neoplasia), or inflammation of an organ (pancreatitis, steatitis).

CBC: -- RETIC: 152.2 K/uL (10-110 K/uL) -- PMN: 12,880/uL (2950-11,640) -- LYMPH: 1880/uL (1050-5100) CHEM: -- SDMA 26 U/L (0-14) -- ALB: 2.1 g/dL (2.2-3.9) -- ALP: 295 U/L (23-212) -- CHOL: 102 mg/dL (110-320) TT4: -- 0.7 ug/dL (1-4) UA (free catch);

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN
Urinary System

The urinary bladder presented uniformly thickened urinary bladder wall isoechoic to the adjacent normal urinary bladder wall. The luminal margin of the thickened urinary bladder wall was mildly asymmetrical in contour. Mineralization or echogenic foci within the thickened areas of urinary bladder wall were not present. The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra exhibited normal tone to a depth of 3.0 cm. Anechoic urine was present in the lumen with no uroliths, sediment, or calculi. The ureteral papillae were normal. The ureters were not visible which is normal. Minor potential for early infiltrative mural neoplasia is possible yet thought less likely, given the pattern of mild urinary bladder wall thickening. The ventroapical urinary bladder wall width measured 0.55 cm.

The area of the aortic trifurcation was free of pathology.

Normal size and margination were present in the kidneys. A normal 1:3 cortex / medulla ratio was maintained. The medulla and cortices were uniform in texture with some increased echogenicity and mild loss of corticomedullary symmetry and definition expected for the age of the patient. No evidence of pelvic dilation was present. The left kidney measured 6.5 cm in length. The right kidney measured 6.4 cm in length. Pinpoint dystrophic medullary mineral were noted in both kidneys.

Adrenal Glands

The left adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 2.1 cm length x 0.64 cm width at the caudal pole. The right adrenal gland was indistinctly visualized owing to regional perirenal omental artifact. The right adrenal gland subjectively measured 2.8 cm length x 1.0 cm width at the caudal pole.



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Spleen

The spleen exhibited subjective normal size with a maintained symmetrical capsule contour. Subtle mild generalized splenic parenchyma heterogeneity was noted. Normal splenic vascularity was present. Mildly expansive, ill-margined, hypoechoic nonhomogeneous mass lesion noted in the cranial spleen measuring 4.3 cm in diameter was present.

Liver/ Gallbladder

The liver was moderately enlarged in size. The liver exhibited subjective mild decreased hepatic parenchyma echogenicity with mild coarse echotexture. Normal hepatic vascular volume was noted without evidence of congestive criteria.. The capsule of the liver was symmetrically rounded to mildly swollen in margination. The gallbladder was non-distended in size with primarily anechoic luminal content. No evidence of gallbladder wall edema or inflammatory criteria was noted. The common bile duct was not definitively visualized, without evidence of post hepatic obstruction.

Gastrointestinal

The stomach presented mild wall thickening secondary to mild echogenic mucosa hypertrophy. Intact wall layering was maintained and distinct. The stomach was empty with mild luminal gas. No evidence of retained ingesta, fluid, or foreign material was noted.

The intestinal walls demonstrated intact wall layering and maintained 1:3 muscularis / mucosa ratio. The mucosa exhibited mildly decreased echogenicity with occasional mucosal speckling. A mild segmental ileus pattern consisting of mild fluid accumulation in the intestinal lumen was present without obstructive pattern or foreign material.

The colon walls presented intact yet mildly prominent wall layering with mild thickened to echogenic submucosa. Non-formed to liquid fecal matter was present in the colon lumen with lumen dilation.

Pancreas

The pancreas was normal in size and contour with isoechoic to heterogeneous parenchyma compared to adjacent omentum. No signs of active inflammation or neoplasia.

Free Abdomen

Moderate to significant volume peritoneal effusion was noted. Generalized nonuniform omentum was noted primarily in mid-cranial abdomen. Intermittent mesenteric lymph nodes were present. These lymph nodes were homogenous, mildly hypoechoic and smoothly marginated. A borderline abnormal width: length ratio was noted (≈ 0.5). Evidence of perilymphatic inflammation was evident. An example of lymph node size was 2.9 cm x 1.3 cm. No omental masses were noted.

Heart

Rapid view of the heart revealed no evidence of overt pericardial masses or effusion in the area of the right atrium / auricle. Subjective normal left and right heart chamber size and LV function were present.



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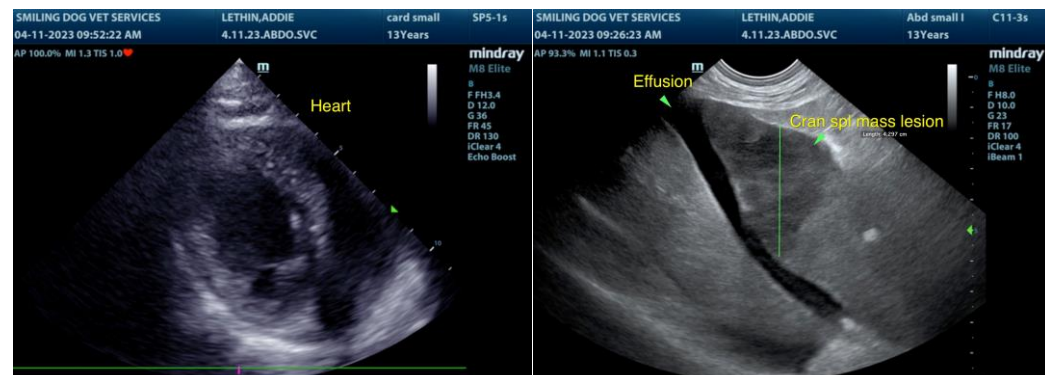
ULTRASONOGRAPHIC FINDINGS

- Mild cystitis pattern
- Hepatomegaly exhibiting mild parenchyma hypoechogenicity, sonographically unremarkable gallbladder - no evidence of post-hepatic obstructive criteria, hepatic congestive criteria, or gallbladder inflammatory criteria / gallbladder edema
- Mildly expansive cranial splenic mass lesion
- gastroenteritis pattern with generalized intact wall layering
- Intermittent nonspecific mesenteric lymphadenopathy
- Moderate to significant volume peritoneal effusion with generalized mild primarily mid-cranial abdominal nonuniform omentum

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Given the reported albumin levels were not to the degree that would diminish oncotic pressure to the point of causing free fluid, as well as no evidence of passive hepatic congestion, or overt intestinal mural pathology that would be responsible for the peritoneal effusion, lymphatic obstruction owing to carcinomatosis, lymphomatosis, or similar, potentially involving the liver and spleen, or effusion secondary to portal hypertension, given the hepatomegaly, is of primary concern. Neoplastic criteria is favored.

In addition to fluid analysis, assuming normal clotting status, hepatic as well as, if accessible, splenic mass lesion FNA cytology is warranted for further clarification. Extremely guarded prognosis is indicated.





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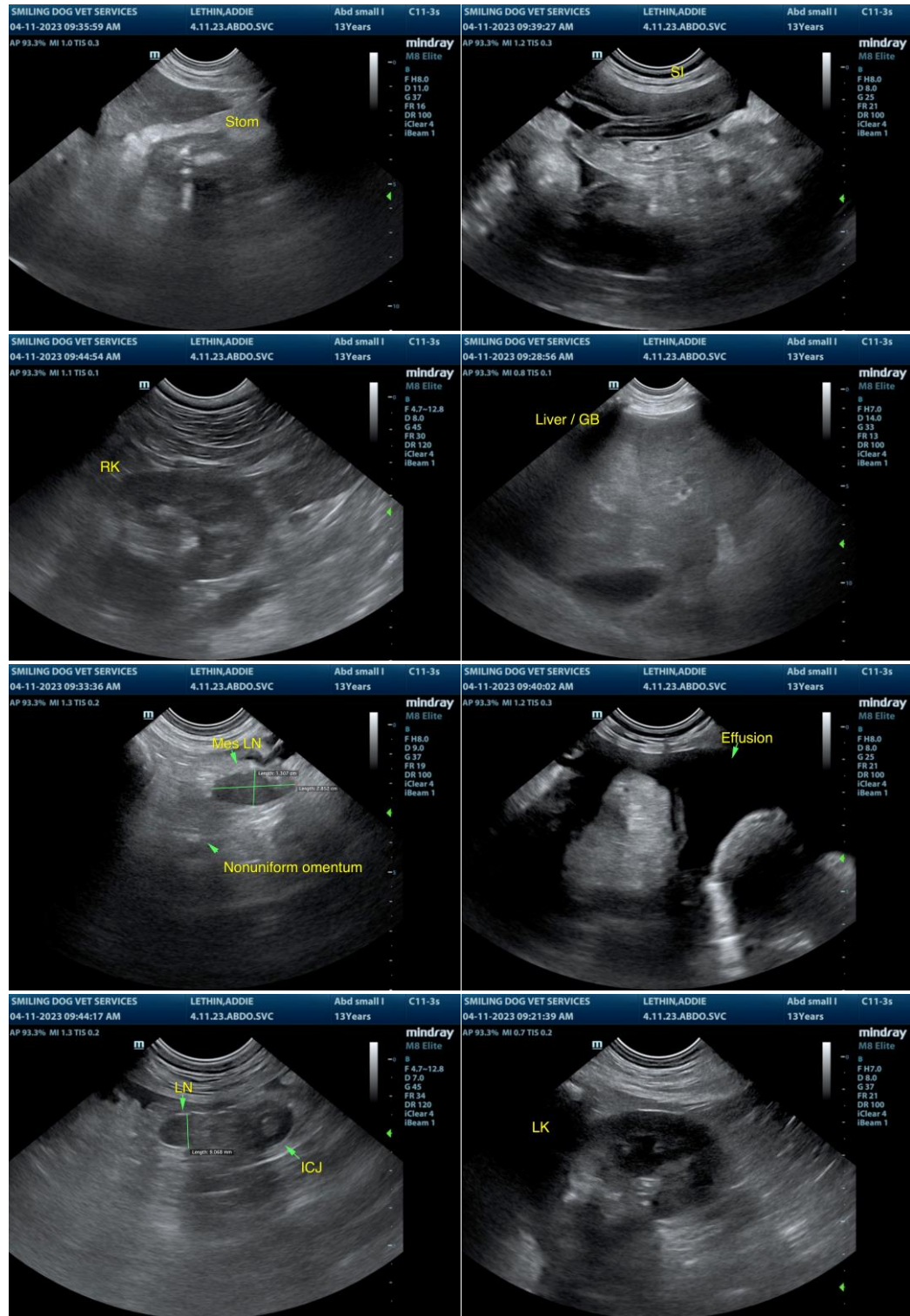
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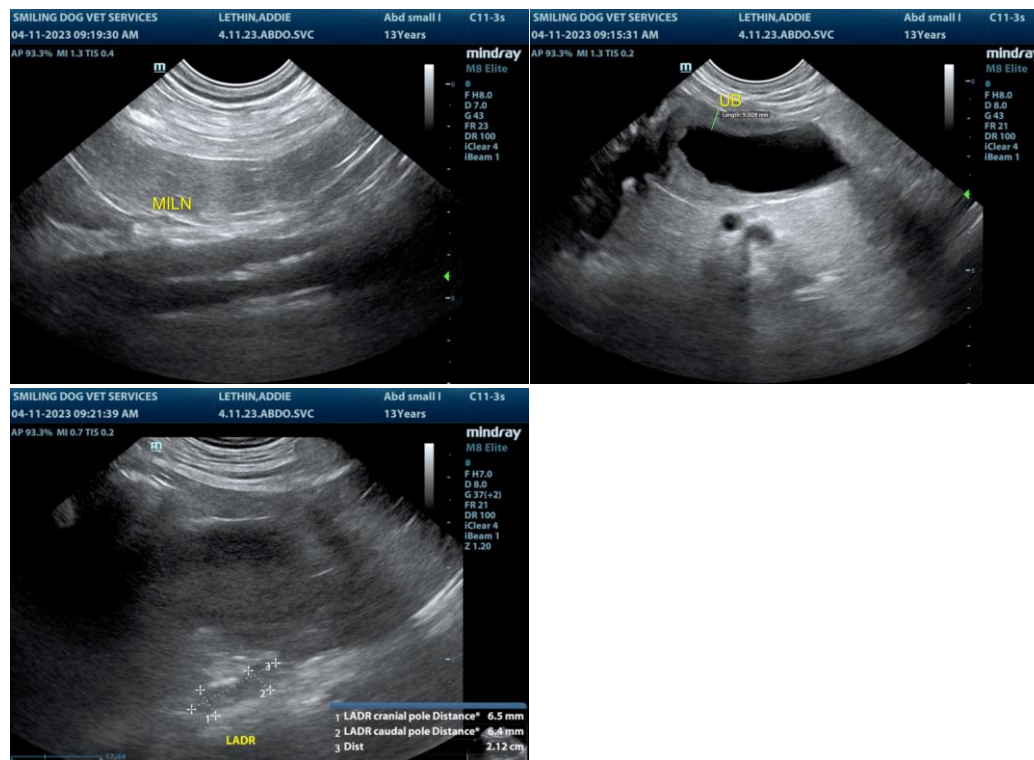
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

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