

**PATIENT**

Sadie Adams

**PRESENTING CLINICAL SIGNS**

Clinical Exam Findings: Sadie is an 11yo FS Labradoodle presenting for anorexia, vomiting, diarrhea and weakness/lethargy. Decreased appetite began three days ago. Two days ago, vomited up her food, and has refused all food since then. Vomited bile a few more times that day. Yesterday was lethargic, and today is almost too weak to stand. Single episode of diarrhea with blood this morning. No known dietary indiscretion, no food changes. No meds of major medical Hx. UTD on Vx, two months behind on HW/flea prevention. Initially hemoconcentrated, now anemic.

**BREED**

Attitude: QDR. Hydration: 5-7% dehydrated. BCS: 5/9. Pain: 0/4. MM: pink, tacky. CRT: 2 sec

Labradoodle

EENT: moderate dental calculus and gingivitis, no nasal or ocular discharge, nuclear sclerosis OU  
PLNS: all peripheral LNs normal in size, soft, symmetric, and non-painful

**SEX**

CV: no murmurs ausculted, tachycardic, regular rhythm, femoral pulses fair and synchronous

Intact Female

RESP: eupneic, bronchovesicular sounds normal in all lung fields

ABD: tense, non-painful, no palpable organomegaly or masses

UG: normal external genitalia

M/S: ambulatory x 4, no evidence of lameness, generalized weakness, mild muscle wasting of the pelvic limbs

**AGE**

INTEG: full hair coat, no alopecia, scale, erythema, or evidence of ectoparasites

11 years

NEURO: depressed mentation, normal CNs, generalized weakness but no ataxia, normal CPs and withdrawals x 4

RECTAL: no palpable masses, sublumbar lymph node not palpable, normal urethra, anal glands mildly full - not expressed, brown diarrhea with mild hematochezia on exam glove

**WEIGHT**

21.6 kg

Abnormal lab-work values:

BG monitoring:

1 PM: 87 --> gave 10 ml 50% Dextrose diluted 1:1 with NaCl

3 PM: 84

5 PM: 92

7 PM: 107

Lactate: 2.1

CBC: HCT 41.6% (N), MCV 58.8 (L), MCHC 39.2 (H), Retic-HGB 21.4 (L), NEU 0.19k (L), Lymph 8.13k (H), Mono 4k (H), Eos 0.05k (L), PLT 55k (L), MPV 17.6 (H), PCT 0.1 (L), rest WNL

PCV/TP: 46%, 5.8

Chem17: tbili 1.3 --> 1.4 on recheck (H), Na 141 (L), K 3.3 (L), Cl 107 (L), rest WNL

Baseline cortisol: >10 (H)

PT: 14 sec (11-17 sec)

PTT: 126 sec (72-102 sec) --> 145 sec on recheck

4Dx: Negative x 4

UA (free catch): USG >1.050, pH 7.0, LEU 25, PRO 100, GLU 100, KET 15, UBG 12, BILI 6, BLD 250, <1

WBC/hpf, 3 RBC/hpf, cocci present, suspect rods, no crystals

**INTERPRETED BY**

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Animal Internal Medicine)

**IMAGING PERFORMED BY**

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**HOSPITAL NAME**

MP Blue Pearl ER

**REFERRING VET**

Danielle Fraser

Current Medications: Cerenia, Protonix, Metronidazole, Unasyn, Baytril, IVF w/ KCL, Dextrose PRN

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**Urinary System**

**INVOICE**

The urinary bladder wall is normal in thickness and the mucosal surface is smooth. The bladder is moderately distended. A small amount of suspended, echogenic debris is observed within the lumen. No masses, inflammatory changes or calculi are observed. Ureteral papillae and visualized portion of the proximal urethra, visible to a depth of 2-3 cm, are normal.

12160

**DATE**

2.6.23

The left kidney is normal in size (6.39 cm in length) with a normal shape, architecture and smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with mild loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydronephrosis. Renal vasculature is normal.

The right kidney is normal in size (6.60 cm in length) with a normal shape, architecture and smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with mild loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydronephrosis. Renal vasculature is normal.

#### **Adrenal Glands**

The left adrenal gland is enlarged (1.05 cm at cranial pole) (1.05 cm at caudal pole) with a slightly irregular shape. The parenchyma is mildly heterogeneous with slight loss of glandular detail. The phrenicoabdominal vein and surrounding vasculature are normal.

The right adrenal gland is borderline enlarged (1.05 cm at cranial pole) (0.81 cm at caudal pole) normal shape; homogeneous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

#### **Spleen**

The spleen is normal in width (1.79 cm in width at the level of the hilum) with a slightly elongated contour. There is appropriate echogenicity and echotexture. A 0.75 cm hyperechoic nodule is observed at the cranial aspect. Splenic vasculature is normal.

#### **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. Luminal contents are anechoic. The cystic and common bile ducts are normal/not seen.

#### **Gastrointestinal**

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 not dilated. The small intestinal wall is normal to borderline thickened (up to 0.40 cm) with retention of the normal layering pattern. There is submucosal thickening in some segments. Discrete masses are not identified. The ileocecal junction and colonic wall are normal. The lumen of the descending colon is severely distended with liquid-appearing fecal material. There is no obvious evidence of an obstructive pattern.

#### **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**

A small amount of free fluid is observed. The mesentery in the mid- to caudal abdomen is hyperechoic. A 1.17 cm lymph node is observed at the aortic trifurcation. In addition, a few prominent mesenteric lymph nodes are seen (the largest measuring 1.57 cm in length).

#### **Other**

A brief echocardiogram reveals no obvious evidence of a right atrial/auricular mass or pericardial effusion. There is questionable mild right atrial enlargement.

## ULTRASONOGRAPHIC FINDINGS

### Primary Findings

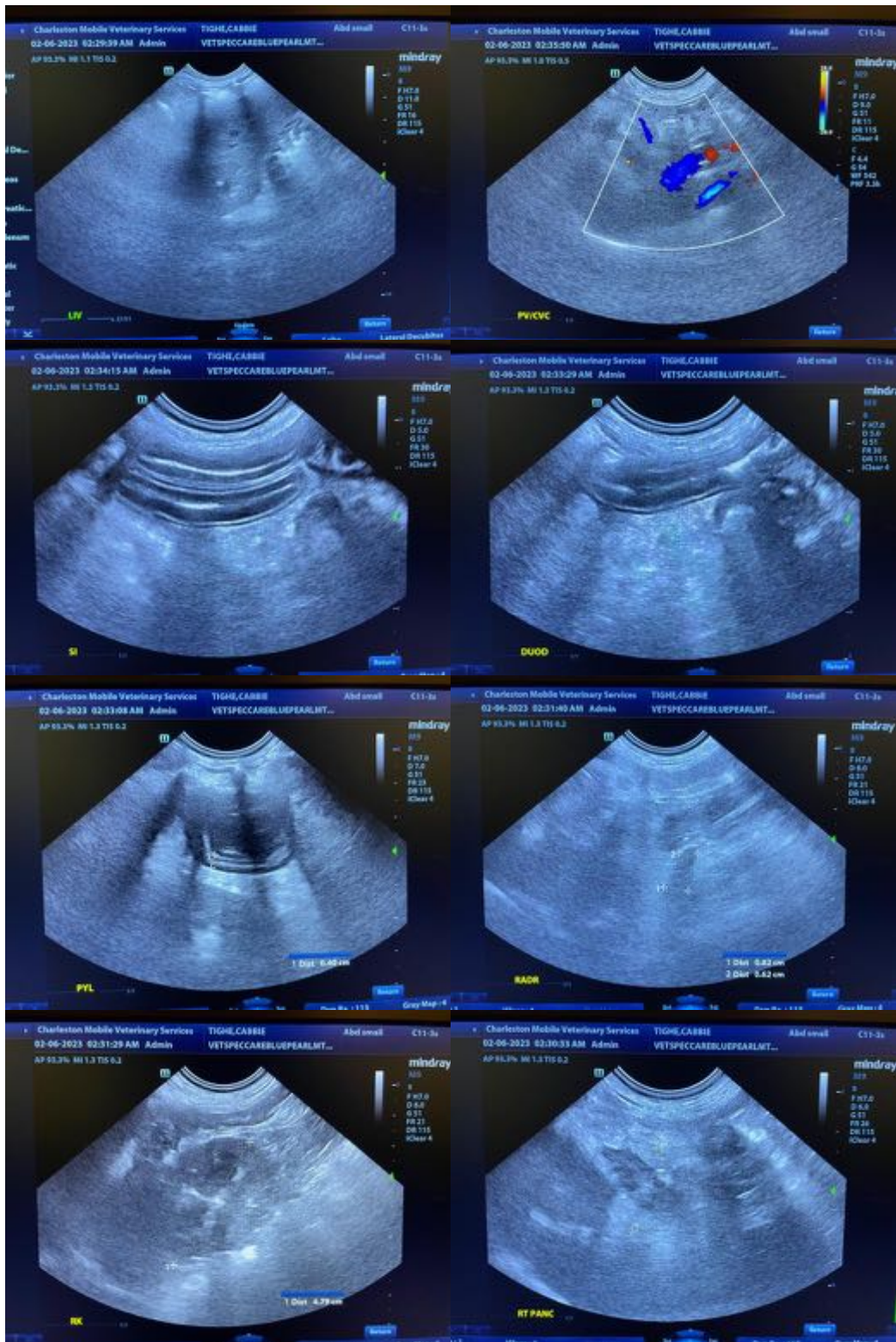
- Bowel changes consistent with enterocolitis of undetermined origin. Considerations include dietary indiscretion, infectious/parasitic disease, microthrombi, food allergy/intolerance, underlying metabolic issue, other.
- Mild diffuse peritonitis, likely secondary to bowel pathology +/- other causes (i.e., increased vascular permeability)
- The prominent abdominal lymph nodes are most consistent with reactive lymphadenitis, lymphoid hyperplasia, or neoplastic infiltration.

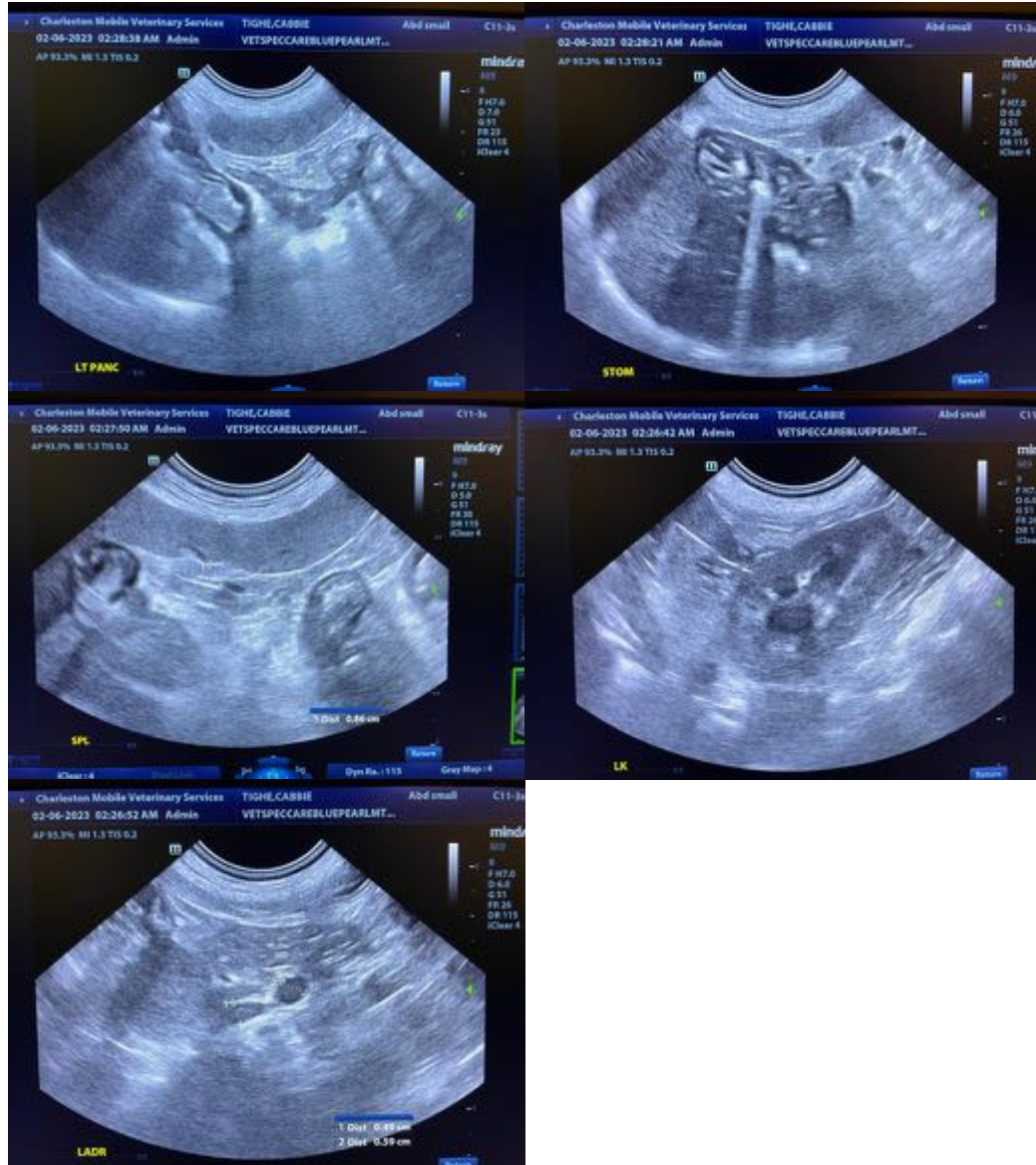
### Secondary Findings

- Mild bilateral age-related renal changes
- The mild bilateral adrenomegaly may be a normal variant for this patient or may represent early hyperplastic change.
- Questionable right atrial enlargement

## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

1. Regarding the anemia and thrombocytopenia, consider the following:
  1. Slide agglutination test to assess for autoagglutination
  2. Comprehensive tick panel
  3. Empirical treatment with doxycycline while awaiting test results
  4. Repeat CBC with reticulocyte count
  5. +/- bone marrow aspirate
- Regarding the GI signs, consider the following:
  1. Fecal evaluation for ova and Giardia (if not already performed)
  2. Fecal PCR infectious disease panel
  3. Symptomatic care for acute enterocolitis, including prophylactic deworming with Fenbendazole, a probiotic and a fiber supplement
  4. If the patient's clinical signs do not improve with supportive measures, a more comprehensive GI work-up may be warranted.
- Given the questionable right-sided cardiomegaly, a full echocardiogram should be considered, particularly if a murmur is present.





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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