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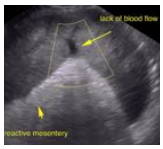
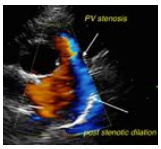
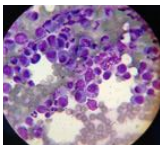
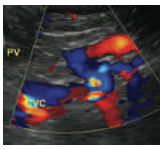

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1-800-838-4268 info@sonopath.com

**PATIENT**

Larry Digregorio

**SPECIES**

Canine

**BREED**

Boxer Mix

**SEX**

Neutered male

**AGE**

5 years

**WEIGHT**

91.6 lbs

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Kelly Vazquez , CVT

**HOSPITAL NAME**

Westwood Regional VH

**REFERRING VET**

Dr. McConnell

**INVOICE**

95428

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1/20/22

## PRESENTING CLINICAL SIGNS

Acute pitting edema all 4 limbs, generalized lymphadenopathy, elevated renal values, hypoproteinemic/hypoalbuminemia, inappetence. Current meds: IVF, Dexamethasone started 1/19 pm, Lasix 1 dose 1/19 pm, zofram, pepcid, unasyn, and Baytril.
Abnormal PE/Chem/CBC/UA Results: 4DX (neg), RBC 5.61, neut. 11.79, BUN 48, creat. 2.3, chloride 125, TP 4.7, albumin 2.0, T4 0.8. U/A: pending.

## 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 prostate is normal in size (1.32 cm) and shape for this neutered male dog. The parenchyma is homogenous and the external margins are smooth. The prostatic urethra appears normal with no evidence of irregularity, invasion, mass effect or calculi.

The left kidney has a normal shape and size (8.01 cm). Overall echogenicity is slightly hyperechoic with poor corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of 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 (7.38 cm). Overall echogenicity is slightly hyperechoic with poor corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

### *Adrenal Glands*

The region of left adrenal (Cranial to left renal artery) is unremarkable but the adrenal is not distinctly visualized. No evidence of a mass effect.

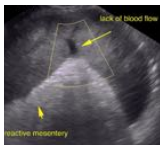
The right adrenal gland is normal in size measuring 0.8 cm at the caudal pole It is observed in its normal position between the cranial aspect of the right kidney and the caudal vena cava. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

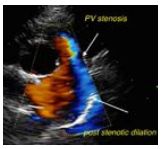
### *Spleen*

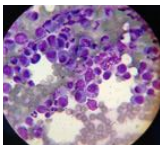
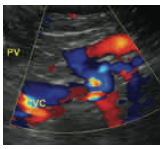
The spleen is subjectively normal in size, echotexture is homogenous, and the splenic capsule is smooth with no irregularities. The blood flow through the hilus and splenic parenchyma appears normal. No focal parenchymal abnormalities are visualized.

### *Liver*

The liver is subjectively normal/borderline small 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 gallbladder lumen is



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moderately distended. The wall of the gallbladder is not thickened and has a smooth mucosal surface. Luminal contents are primarily anechoic. 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 uniform diameter with minimal fluid distension. Wall appears subjectively, mildly increased. The duodenum measured 0.45 cm and the jejunum measured 0.32 cm, 0.38 cm. Bowel loops follow a typical curvilinear path with distinct wall layering. Visualized peristalsis appears appropriate. There were no focal lesions consistent with obstruction or a mass effect observed

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 prominent and mottled compared to the surrounding isoechoic mesentery. There is no evidence of nodules or cystic lesions. There is no evidence of regional mesenteric inflammation or fluid.

### *Free Abdomen*

There is a small amount of free fluid visualized No significant lymphadenomegaly and the omentum appears generally hyperechoic.

## ULTRASONOGRAPHIC FINDINGS

**PRIMARY FINDINGS:**

- Decreased corticomedullary distinction in both kidneys. Mild loss of corticomedullary distinction in both kidneys could be consistent with chronic degenerative disease or interstitial nephrosis.
- Mild small intestinal thickening. The mild small intestinal wall changes may be a normal variant in this patient or could be consistent with an inflammatory process (e.g., inflammatory bowel disease).
- Small volume of free abdominal fluid and inflamed mesentery. The findings are most consistent with inflammation and edema.

**SECONDARY FINDINGS:**

- Prominent, mottled pancreas, The pancreatic changes are most consistent with age-related parenchymal remodeling, potentially secondary to a prior inflammatory episode, early fibrosis or chronic pancreatitis.

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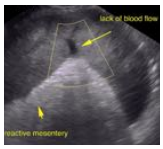

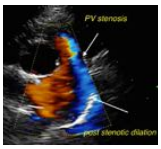

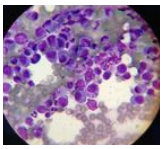
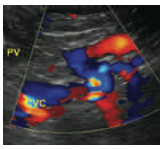


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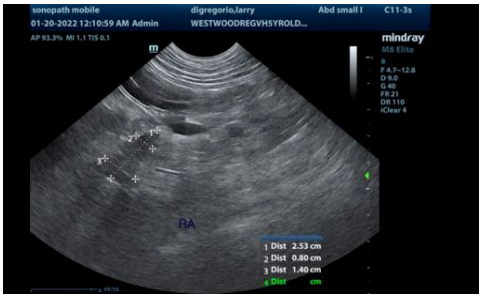
- Borderline small liver. The significance of this is unclear. Correlate with blood work and a liver function test.

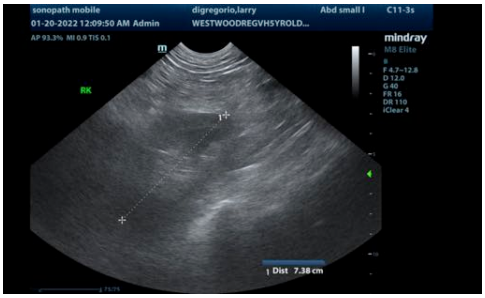
## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

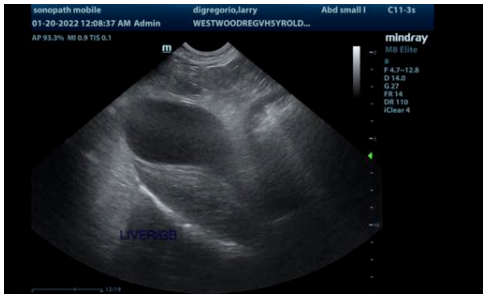
Based on the history provided I am concerned about a possible protein losing nephropathy and nephrotic syndrome.

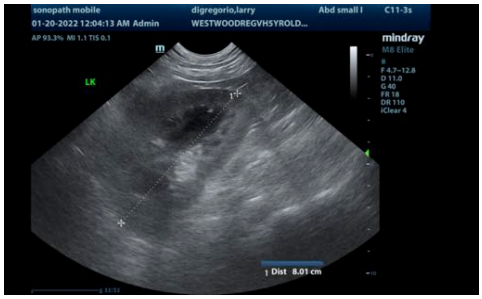
- Recommend a urine protein to creatinine ratio, urinalysis and urine culture.
- Recommend blood pressure evaluation
- For additional work-up of hypoalbuminemia I recommend a liver function test and you can consider a GI panel to Texas A&M to further evaluate the small intestine.
- Recommend testing for Leptospirosis.
- If the peripheral lymph nodes are genuinely large (not just edematous) then you can consider a lymph node biopsy. Additionally consider a full vector borne disease panel though NC State Vector borne disease lab (canine comprehensive panel)_

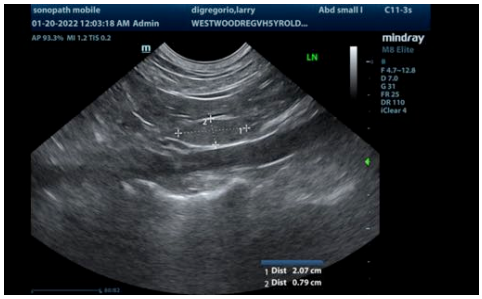
If significant proteinuria is present then consider evaluation of the ACVIM consensus statement at ACVIM.org for helpful information on therapy and monitoring.











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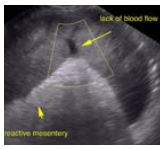
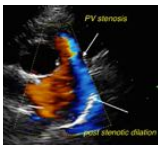
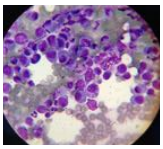
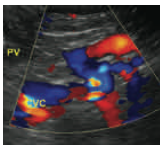

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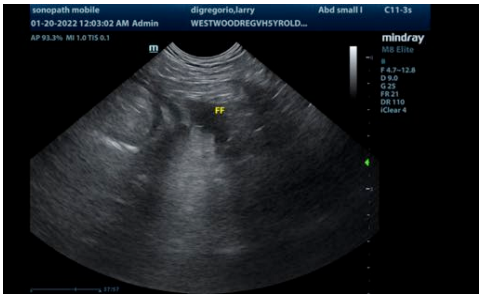


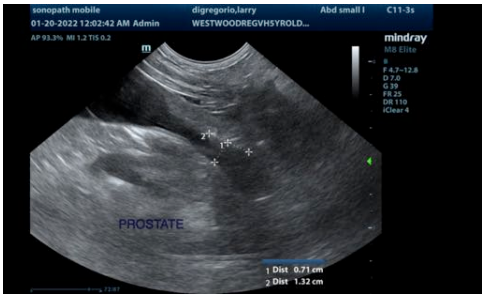


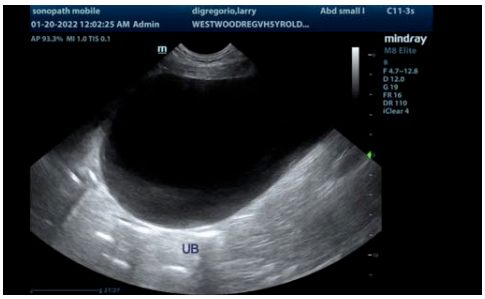


**The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.**

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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kathleen.sennello@sonopath.com