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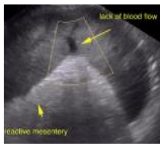
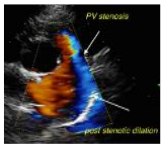
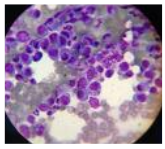
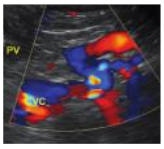

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1-800-838-4268 info@sonopath.com

PATIENT
Ruby Anderson

SPECIES
Canine

BREED
Chihuahua Mix

SEX
Spayed Female

AGE
14 Years

WEIGHT
6.6 Pounds

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

IMAGING PERFORMED BY
Lucas Budden

HOSPITAL NAME
Frontier VH

REFERRING VET
Lucas Budden

INVOICE
15846

DATE
6/1/22

PRESENTING CLINICAL SIGNS

History: Seen at another clinic 5/3/2022 for anorexia, vomiting, and weight loss. Diagnosed with UTI and started on Clavamox. Returned to Frontier Veterinary Hospital for blood work and recheck UA on 5/19/2022. Due to increase in kidney values was hospitalized for 24 hours. Values came down, but a couple days later the values went right back up again. Ultrasound to assess for underlying illnesses related to worsening kidney disease.

Abnormal PE/Chem/CBC/UA Results: 11/16/2021 chemistry BUN high 36 Creatinine normal 1.2 5/3/2022 cbc/chem/UA - Urinalysis: Urinary tract infection. Blood and bacteria seen in urine. - Blood work: Complete blood count within normal limits. Blood chemistry: BUN 42, Creatinine 1.6, remainder no significant findings. - Comp CBC: BUN 42, creatinine 1.6, Phos 2.7, Amy 2533, Glu 150, Na 160, rest NSF 5/19/22 cbc/chem/UA/culture BUN high 50 Creatinine high 4.1 USG 1.018 Culture negative 5/24/22 after hospitalization for day on IV fluids BUN high 42 Creatinine high at 1.7 5/27/2022 BUN high 57 Creatinine high at 3.8

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 left kidney has a normal shape and size (2.7cm). Overall echogenicity is slightly hyperechoic with decreased corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. Small nonobstructive nephroliths were present. There is no evidence of pyelectasia, infarcts or hydroureter. Renal vasculature is normal.

The right kidney has a normal shape and size (2.68 cm). Overall echogenicity is slightly hyperechoic with decreased corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. Small nonobstructive nephroliths were present. There is no evidence of pyelectasia, infarcts or hydroureter. Renal vasculature is normal.

Adrenal Glands

The left adrenal gland is normal in size measuring 0.43 cm at the caudal pole. It is observed in its normal position cranial to the left renal artery. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

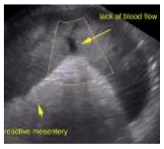
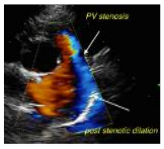
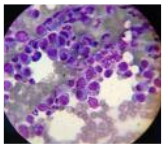
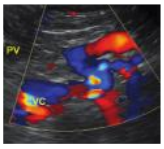
The right adrenal gland is normal in size measuring 0.32 cm at the caudal pole. It is observed in its normal position between the cranial aspect of the right kidney and the caudal vena cava. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

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 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 gall bladder lumen is moderately

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distended. The wall of the gall bladder 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 relatively uniform diameter with minimal fluid distension. Wall thickness is normal. Bowel loops follow a curvilinear path with distinct wall layering maintaining the typical 1:3 muscularis:mucosa layer ratio. The duodenum measured as normal (between 0.3-0.5 cm in wall thickness) and the jejunum measured as normal (0.28 cm) 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/region of the pancreas) is normal and isoechoic to surrounding mesentery. There is no evidence of nodules or cystic lesions. There is no evidence of regional mesenteric inflammation or fluid.

Free Abdomen

Evaluation of the peritoneal cavity did not reveal any evidence of effusion, or subjective lymphadenomegaly. The Medial iliac nodes appear normal and there was no evidence of a caudal aortic thrombus at the bifurcation. The omentum is of normal uniform echogenicity.

ULTRASONOGRAPHIC FINDINGS

- Decreased corticomedullary distinction in both kidneys with occasional nonobstructive nephroliths. Mild loss of corticomedullary distinction in both kidneys could be consistent with chronic degenerative disease or interstitial nephrosis. The hyperechoic mineralized foci observed at the corticomedullary junction of the left/right kidney are consistent with small, non-obstructive nephroliths.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Today's scan was relatively normal, aside from the changes observed in the kidneys. These changes are consistent with chronic progressive disease. No evidence of obstruction, inflammation, etc. are visualized. I recommend a blood pressure evaluation, urine protein to creatinine ratio and urinalysis and culture to obtain a baseline.

I agree that the azotemia seems somewhat mild, as compared to how this dog is feeling. I feel dogs that are significantly proteinuric tend to feel worse with milder azotemia. So, it is worth evaluating for this. Additionally, you could consider underlying gastrointestinal disease with a GI panel (to Texas A & M) for a qualitative PLI, TLI, cobalamin and folate to further evaluate the pancreas and small intestine. I would consider continuing supportive medications for gastrointestinal upset long-term and even consider subcutaneous fluids intermittently.

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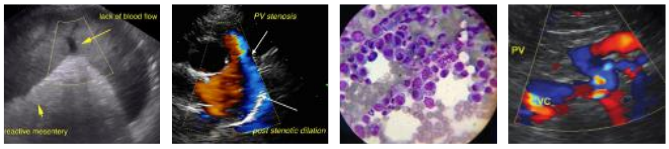

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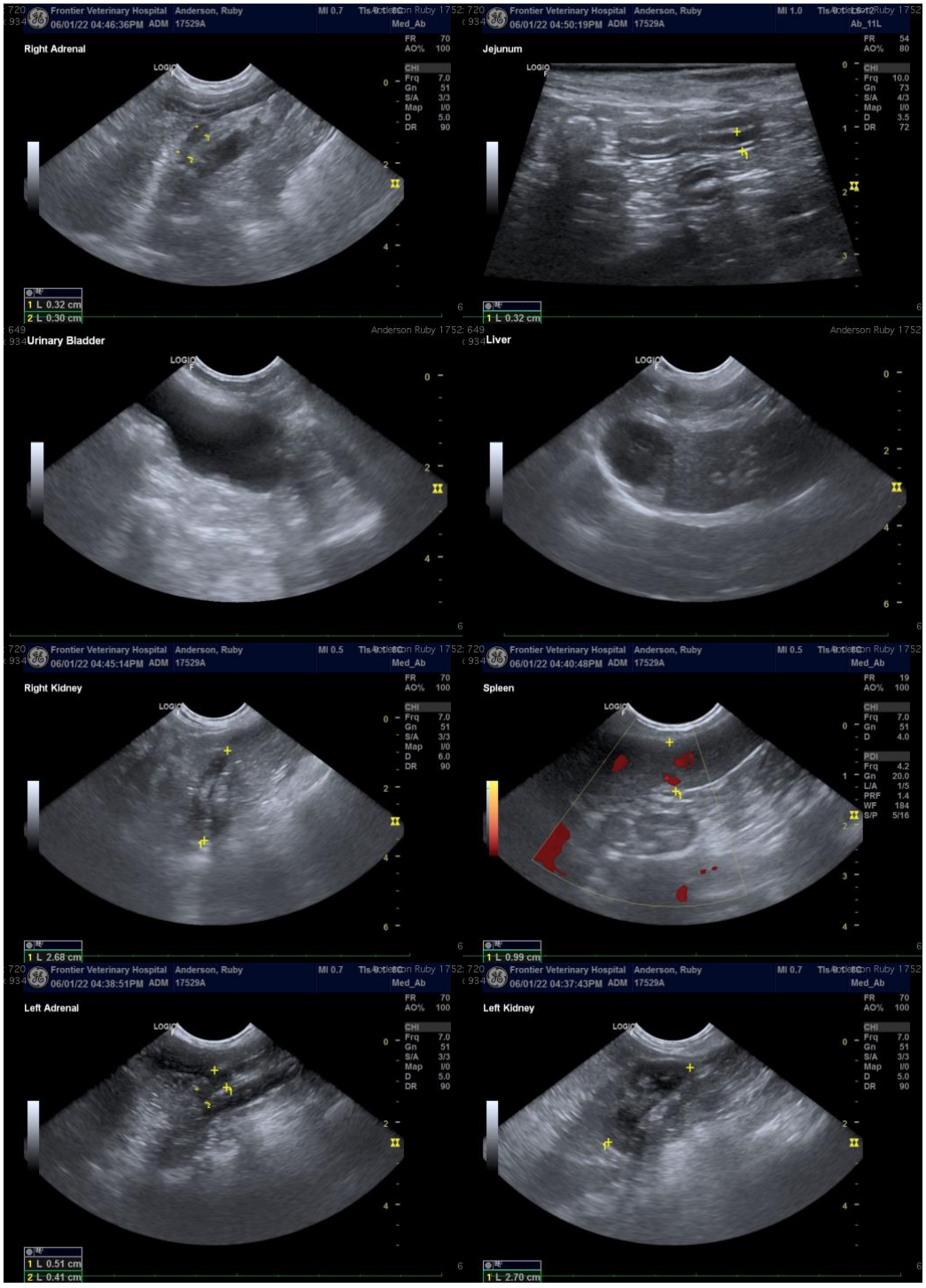

The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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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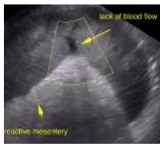
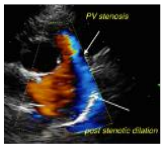
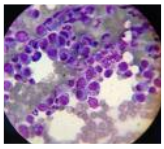
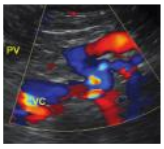

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