



PATIENT PRESENTING CLINICAL SIGNS

Dave Miller

History: Abdominal ultrasound performed in July of 2020 because of elevated liver values and icterus. Imaging at that time revealed hyperechoic hepatopathy consistent with hepatic lipidosis, mild jejunal and ileal thickening, and mildly hyperechoic renal parenchyma attributed to tubular lipid deposition. Recovered with supportive care after this episode. History of CKD, hypertension and a grade 2/6 parasternal systolic HM. Seen 4/14/2022 due to increased frequency of vomiting. Vomiting was about 1x/month historically, but increased around that time. Appetite has been intermittent. After that appointment was having episodes of vomiting (3-10x in one day) about every week for 3 weeks. Treated with Cerenia and Mirtazapine and is back to normal now. Currently receiving amlodipine (2.5 mg, 1/4 tab PO q24h), monthly B12 injections, and 150 ml SC fluids per week. On exam today patient is well hydrated, BCS 9/9, moderate dental tartar, no abdominal pain on palpation, and stable grade 2/6 parasternal HM. Stable weight of 19.1# compared to last visit about 1 month ago. No diarrhea. Abnormal PE/Chem/CBC/UA Results: 4/14/2022 Senior BW panel Creatinine high at 3.7 Cholesterol high 240 Amylase high 1262 PSL high 37 Platelet low, estimate adequate Lymphocytes low 795 T4 low normal 0.8 USG 1.020 Protein 1+ Clear appearance RBC 21-50 Quiet sediment otherwise

SPECIES

Feline

BREED

Domestic shorthair

SEX

Male, neutered

AGE

11 Yrs.

WEIGHT

19.1 lbs.

INTERPRETED BY

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

IMAGING PERFORMED BY

Dr. Lucas Budden

HOSPITAL NAME

Frontier VH

REFERRING VET

Dr. Lucas Budden

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DATE

5/9/22

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder, trigone, and pelvic urethra are normal in thickness and the mucosal surface is smooth. The bladder lumen is moderately distended with mostly anechoic urine. No masses, inflammatory changes or calculi are observed. Ureteral papillae and visualized portion of the proximal urethra, visible to a depth of 2 cm, are normal.

The left kidney is normal size (4.25 cm in length) with a slightly irregular shape. The cortex is diffusely thickened and hyperechoic and there is moderate loss of corticomedullary distinction. A hyperechoic medullary band is seen at the corticomedullary junction. Trace pyelectasia is present. There is no evidence of nephroliths, infarcts or hydroureter.

The right kidney is normal size (4.14 cm in length) with a slightly irregular shape. The cortex is diffusely thickened and hyperechoic and there is moderate loss of corticomedullary distinction. A hyperechoic medullary band is seen at the corticomedullary junction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter.

Adrenal Glands

The left adrenal gland is normal in size (0.52 cm width). Normal shape and glandular echogenicity. The phrenicoabdominal vein and surrounding vasculature are normal.

The region of the right adrenal gland is evaluated. No obvious pathology is observed.

Spleen

The spleen is normal in size (0.85 cm in width at the level of the hilus) with a normal capsular contour. There is appropriate echogenicity and echotexture. No focal lesions are observed. 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



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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.

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Gastrointestinal

The gastric lumen is moderately distended with ingesta. 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 thickness is normal with a normal layering pattern and appropriate mural detail. Discreet masses are not identified. The ileocecal colic junction and colonic wall are normal. No obstructive disease is noted.

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Pancreas

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A portion of the pancreas is obscured by the gastric distention. In the visualized portions, no obvious pathology is seen.

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Free Abdomen

The peritoneal cavity is normal. There is no evidence of inflammation or effusion. A 0.60 cm colic lymph node is visualized.

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ULTRASONOGRAPHIC FINDINGS

- The bilateral renal changes are most consistent with chronic interstitial nephrosis/nephritis.
- The prominent colic lymph node is likely reactive.

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(*Small Animal Internal
Medicine*)

*An obvious cause for the patient's increased vomiting frequency is not identified in this study. Considerations include progressive renal disease (if applicable), microscopic gastrointestinal disease (i.e., inflammatory bowel disease, food allergy/intolerance), underlying metabolic issue, low-grade pancreatitis, other.

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INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

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- Serum cobalamin, folate, PLI and TLI.
- A fecal evaluation for ova/Giardia.
- Consider empirical treatment for helicobacter infection:

Amoxicillin: 10-22 mg/kg PO q 12 hours x 14-21 days

Metronidazole: 10-15 mg/kg PO q 12 hours for 14-21 days

Omeprazole: 0.7 mg/kg PO q 24 hours for 14-21 days

(+/- the addition of Bismuth subsalicylate: 3.85 mg/kg PO q 6-8 hours x 14-21 days)

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- Consider a 6 week limited antigen diet trial, if the patient will tolerate it.
- Thoracic radiographs (three-view) are recommended to assess for occult esophageal disease.

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- Ultimately, endoscopic or surgical gastrointestinal biopsies may be necessary to get a definitive diagnosis. However, given the patient's renal disease, the benefits of biopsy must be weighed against the risks of anesthesia.

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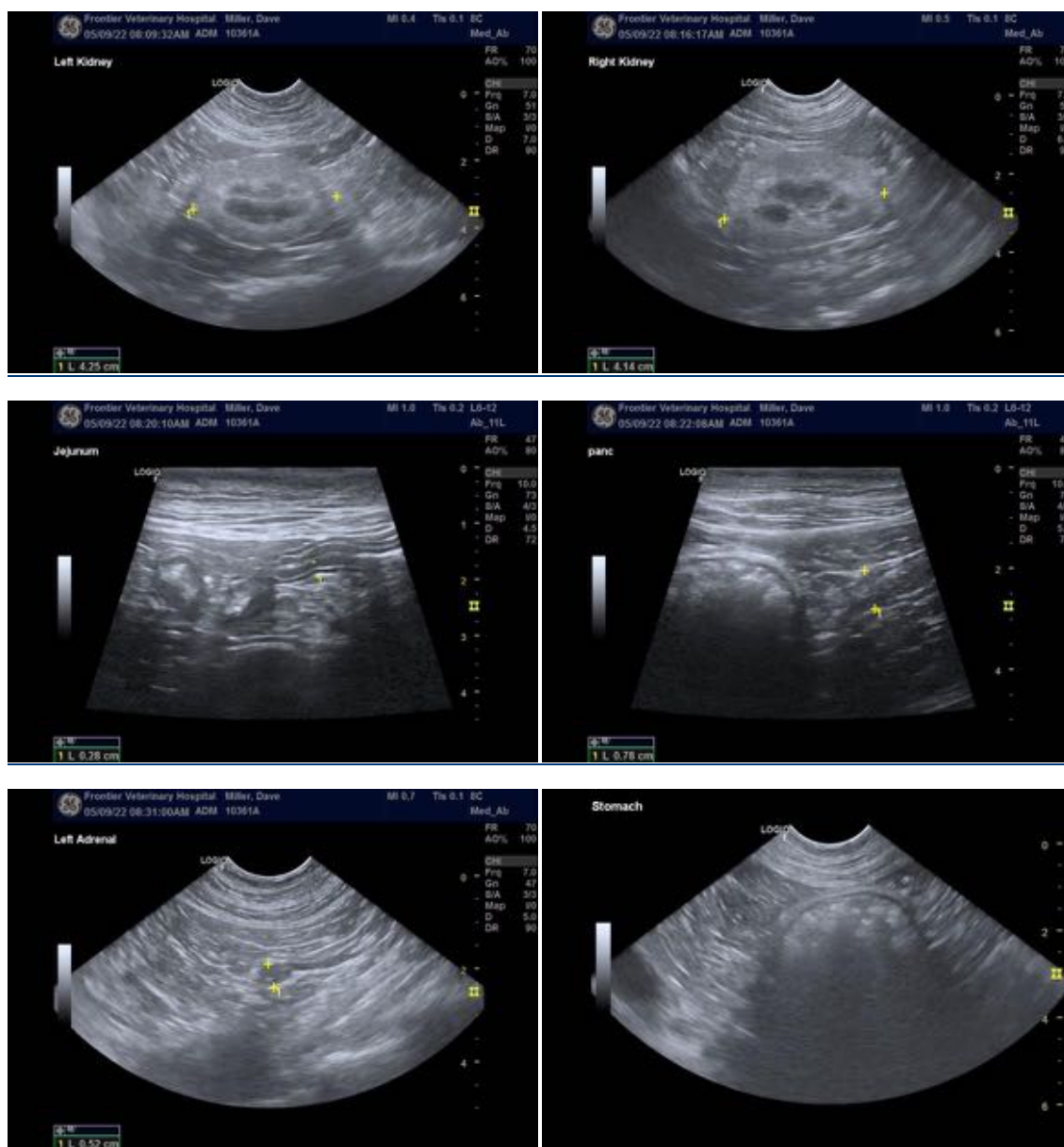
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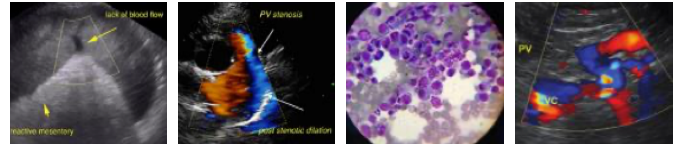
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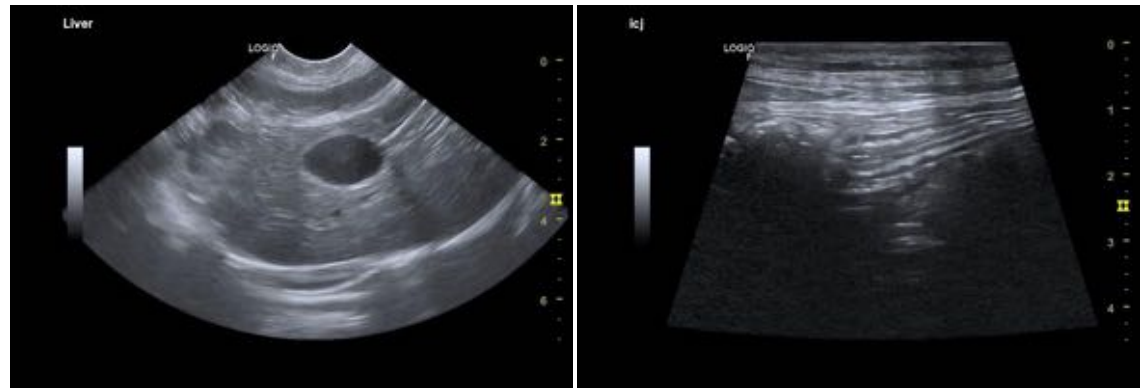
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

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

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