



PATIENT

Nala Root

SPECIES

Spayed Female

BREED

GSD

SEX

Spayed Female

AGE

10 Years

WEIGHT

69.6 Pounds

INTERPRETED BY

Eric Lindquist, DMV,
DABVP (CFM), Cert.
IVUSS

IMAGING PERFORMED BY

Dr Jenni Tudini,
MRCVS, SDEP Cert
(Abdo)

HOSPITAL NAME

East Aurora VH

REFERRING VET

Dr. Megan Dudek

INVOICE

35509

DATE

11/14/25

PRESENTING CLINICAL SIGNS

History: Patient has developed hyporexia recently and has become significantly more finicky with food. At this time owner is struggling to have patient take in just shredded chicken and she is turning her nose up at treats. She hadn't eaten any form of a full meal including kibble for at least 5 days prior to the scan and so her stomach should have been empty given that she was also fasted overnight. She has had vomiting on the occasion that she does eat a larger meal and it will often lead to vomiting up food that owner knows she ate 2-3 days prior. There is smaller fecal output and after the first part is voided that is formed it then becomes diarrhea. No PU/PD, no C/S noted. Patient has lost 10lbs progressively since 03/25.

Abnormal PE/Chem/CBC/UA Results: P/e: - BCS 4/9, Cranial abdomen feels full and a little tense
Chem: Iris stage 2-3 CKD, SDMA 24 (0-14), CREA 2.9 (0.5-1.5), BUN 94 (9-31), Albumin 1.8 (2.7-3.9)
Severe hypoproteinemia characterized by hypoalbuminemia and hypoglobulinemia. Rule outs include PLE and PLN. CBC: Reticulocytes: 153.3 (10-110), hemoglobin 2 (13.1-20.5) Fecal: NEG 4DX: NEG x 4.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The **urinary bladder**, trigone, and pelvic urethra presented normal thicknesses and normal tone. The ureters were not visible which is normal. No uroliths or sediment were visualized and anechoic urine was present. No evidence of inflammatory or neoplastic changes was noted. Ureteral papillae were normal.

The **left kidney** was severely dystrophic with minimal blood flow on power doppler assessment. Slight pyelectasia was noted in the left kidney. A thin cortex was noted. The left kidney measured 3.9 cm.

The **right kidney** was subnormal in size as well with diffuse hyperechoic parenchymal changes and reduced blood flow. The right kidney measured approximately 5.2 cm.

Adrenal Glands

The **left adrenal gland** was small in size. The left adrenal gland measured 2.15 cm x 0.55 cm at the cranial pole and 0.53 cm at the caudal pole.

The **right adrenal gland** was not visualized.

Spleen

The **spleen** revealed slight heterogenous parenchymal changes with normal size and contour otherwise.

Liver

The **liver** images from right and left intercostal as well as subcostal views revealed subjectively normal liver size, contour, and structure. Some mild age-related parenchymal remodeling was noted but likely not clinically significant at this time. Vascular and biliary tracts were of normal volume and no evidence of congestion was noted. The gallbladder presented some dependent debris with essentially



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normal contour. The cystic and common bile ducts were normal. Occasional hyperechoic lipid plaques were noted in the liver.

Gastrointestinal

The **gastrointestinal tract** revealed diffuse, hyperechoic fogging or overlay throughout the small intestine as well as areas of mucosal striations and speckling. This striation + fogging effect appeared to exclusively affect the mucosal layer with the submucosa, muscularis and serosa left in-tact. Reactive mesentery was present associated with the serosa indicative of active inflammation. This is most consistent with protein losing enteropathy/lymphangiectasia. Full thickness biopsies or endoscopy guided biopsies would be ideal to confirm. No obstructive disease or obvious suspicion of neoplasia. Some retention of ingesta was noted in the stomach.

Pancreas

The base and limbs of the **pancreas** were observed to be largely isoechoic to surrounding omental fat. Pancreatic duct and capsular contour were acceptably normal and parenchyma respected normal curvilinear patterns. No overt evidence of active inflammatory or neoplastic disease was noted.

ULTRASONOGRAPHIC FINDINGS

- Intestinal mucosal fogging, consistent with lymphangiectasia.
- Dystrophic left kidney, likely poorly functional
- Subnormal right kidney size with hyperechoic parenchymal changes.
- Small left adrenal gland.
- Slightly heterogenous parenchymal changes in the spleen.
- Age-related hepatic changes with occasional hyperechoic lipid plaques.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

There are multiple comorbidities in this patient; end stage degenerative renal disease, along with protein losing enteropathy/lymphangiectasia. Screening for Addison's would be indicated given the subnormal adrenal size. Prognosis long term is poor, mainly from the degenerative aspects of the kidneys. Blood pressure measurements are indicated. Management for PLE and impending renal failure is indicated.

For an additional charge, internal medicine consult can be utilized through SonoPath.com. You can select the internal medicine drop down at <http://spa.sonopath.com/>.

One of the world's top internists & SonoPath associate Dr. Remo Lobetti BVSc, MMedVet, PhD, DECVIM can evaluate your case through SonoPath. <https://sonopath.com/resources/sonopath-services/internal-medicine-teleconsultation-services>



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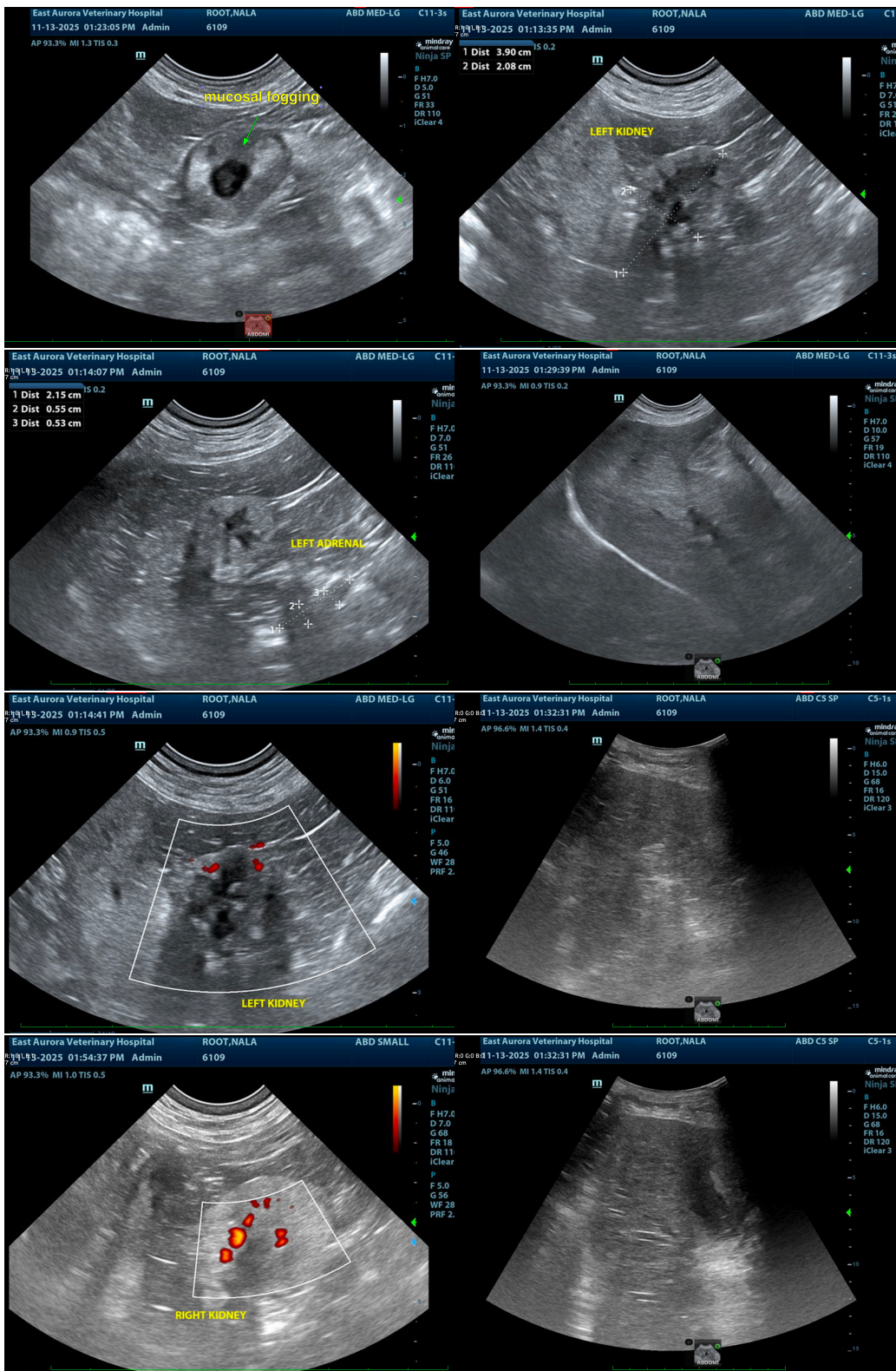
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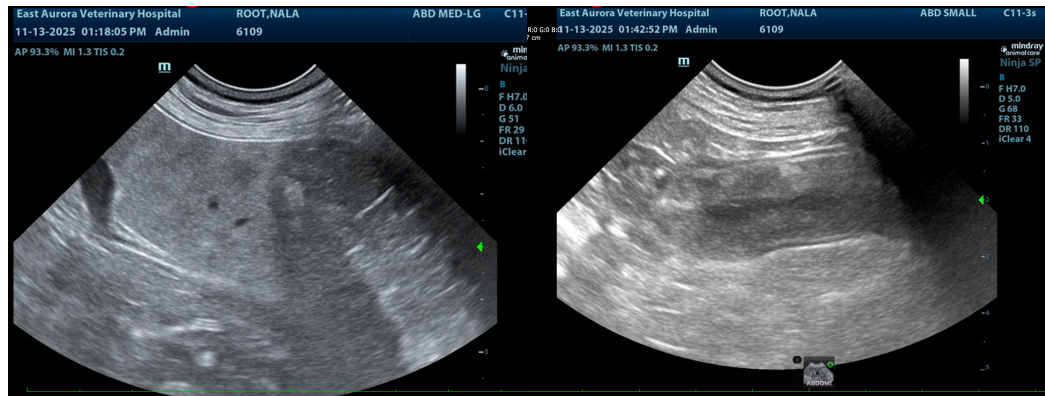
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

Eric Lindquist, DMV, DABVP(CFM), Cert. IVUSS,
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