



PATIENT

Abby Ryan

SPECIES

Feline

BREED

DSH

SEX

Spayed Female

AGE

13 Years

WEIGHT

4.88 kg

INTERPRETED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

IMAGING PERFORMED BY

Dr. Kuzimski

HOSPITAL NAME

Animal Emergency
Hospital Deland

REFERRING VET

Dr. Kuzimski

INVOICE

21665

DATE

3/17/23

PRESENTING CLINICAL SIGNS

History: Abby a 13yo FS DSH presents for acute lethargy, and inappetence. She has been showing symptoms since Wednesday. Radiographs taken on 3/17/2023 showed: 1. Renal asymmetry with small left kidney and enlarged right kidney. The changes within the left kidney may be associated with chronic renal disease. Enlargement of the right kidney could be secondary to compensatory hypertrophy, though the potential for hydronephrosis or pyelonephritis contributing to this appearance is also considered. 2. Punctate mineral seen within the soft tissues caudal to the kidneys could be indicative of mineral within a ureter, though summation artifact is not excluded. 3. Normal radiographic appearance of the gastrointestinal structures. An abdominal ultrasound was recommended for further evaluation

Abnormal PE/Chem/CBC/UA Results: CBC: NSF COMP: BUN > 140, creatinine 13.7, phosphorus > 15, total bilirubin 1.5 EPOC: pO2 58.7, cSO2 80.9, potassium 6.3, sodium 138, BUN > 120, creatinine > 15

*Minimal liver views submitted.

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 were noted. Ureteral papillae were normal.

The **right kidney** was subnormal in size, measuring 2.7 cm. Pyelectasia and mild pericapsular fatty enhancement was noted, suggestive for chronic nephritis/nephrosis.

The **left kidney** was mildly enlarged and swollen in contour with pyelectasia and echogenic fat. Pericapsular inflammation and enhanced mesentery were noted. The right kidney measured 4.8 cm.

Adrenal Glands

The regions of the **adrenal glands** revealed no evident pathology.

Spleen

The **spleen** presented a smooth homogeneous parenchyma hyperechoic to liver and renal cortical parenchyma. The capsule was smooth without noticeable expansion or deviation from within the spleen or adjacent pathology. The splenic vasculature demonstrated normal volume without signs of congestion or thrombosis. No sonographic evidence of acute or chronic inflammatory, neoplastic, or infarctual changes were noted.

Liver

The **liver** images from right and left intercostal as well as subcostal views revealed subjectively normal liver size, contour, and structure. Some minor 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 normal contour. The cystic and common bile ducts were normal. No overt evidence of active inflammatory, infiltrative or regenerative pathology was noted but should be paired with current or past LE elevations regarding any clinical significance to this presentation. The hepatic lymph nodes were unremarkable.



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Gastrointestinal

Examination of the **gastrointestinal tract** revealed a stomach and intestine free of stasis, of normal wall thickness, acceptable curvilinear mural detail, and peristaltic activity. Small and large intestine demonstrated normal luminal chyme and stool consistency respectively. No obstructive or overt infiltrative disease was noted. No associated abnormal lymphatic activity was noted.

Pancreas

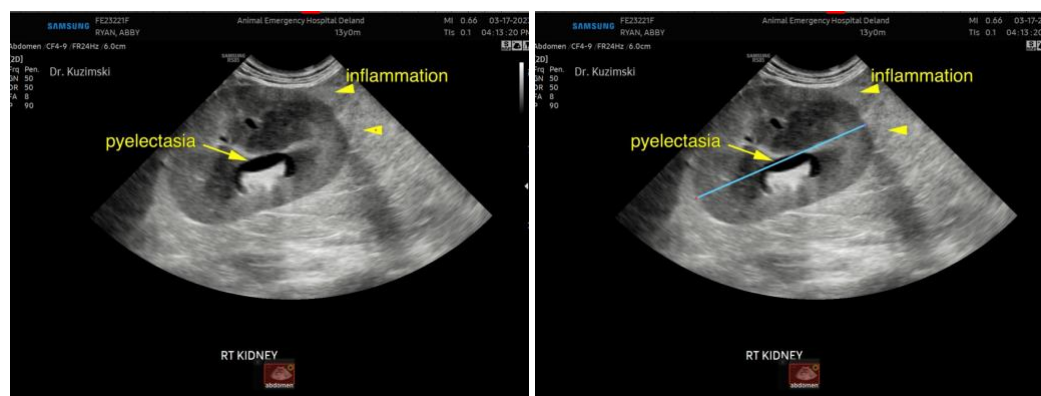
The base and limbs of the **pancreas** were observed to be largely isoechoic to surrounding omental fat. Pancreatic duct and capsular contour were acceptably normal and parenchyma respected normal curvilinear patterns. No overt evidence of active inflammatory or neoplastic disease was noted.

ULTRASONOGRAPHIC FINDINGS

- Nonspecific nephritis/pyelonephritis pattern- Chronic low grade active nephritis/nephrosis of the left kidney with secondary degenerative changes and subnormal size and active nephritis of the right kidney with pyelectasia
- Nonspecific hepatic changes

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

If the bilirubin value is persistent, then FNA of the liver is warranted, however, hemolysis or lab artifact should be considered given that no other reported liver enzymes were elevated, such as ALP, which I would expect in a cat with bilirubin elevation. Hemolysis should be considered if PCV is subnormal, as its possibly causing bilirubin elevations, however, acute on chronic nephritis/nephrosis with recent insult, such as infection, passage of calculi, and toxin exposure should all be considered. 72-hour IV fluid protocol is warranted. Blood pressures and urine culture and sensitivity are indicated. Prognosis is guarded. The kidneys do not appear end stage, however, they appear subjectively 40-50% compromised. Recheck sonogram after 72 hours of therapy to assess renal state.





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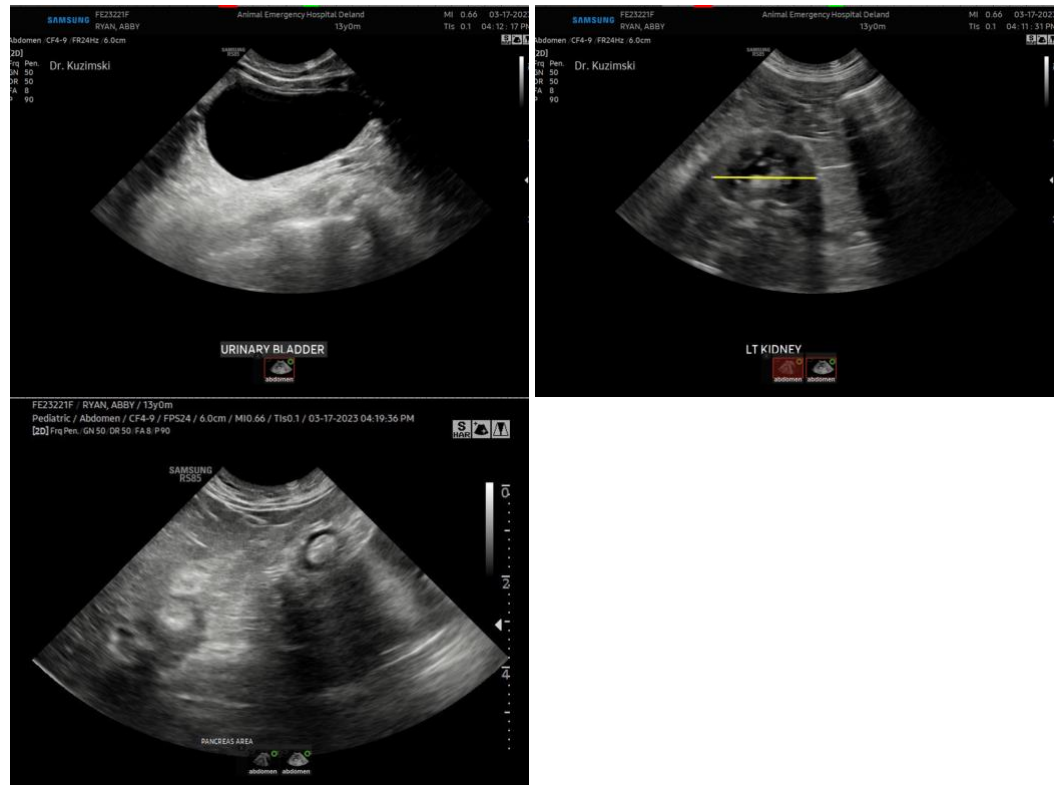
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

Eric Lindquist, DMV, DABVP, Cert. IVUSS, CEO of SonoPath.com
info@SonoPath.com