

PATIENT

Scruffles Combs

SPECIES

Canine

BREED

Havanese

SEX

Neutered Male

AGE

13 Years 6 Months

WEIGHT

15.5 Pounds

INTERPRETED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

IMAGING PERFORMED BY

Loetitia-Saint Jacques,
LVT, RVT

HOSPITAL NAME

MountainView AH

REFERRING VET

Dr. Sarah Kalivoda

INVOICE

33866

DATE

12/30/21

PRESENTING CLINICAL SIGNS

PAWS Request Form: Chief Concern / Provisional Diagnosis: Chronic renal disease and elevated ALT
Relevant Medical History and Physical Exam findings: Polydipsia has been noted over the past month in Scruffles. Despite a first morning USG, urine sample is still dilute at 1.014. Recent blood work has shown azotemia and a mildly elevated ALT. Last ultrasound showed potential thickening of gastric wall. Patient has been having loose stool and occ vomiting recently. No proteinuria noted. Urine culture and blood pressure to be performed same day of ultrasound
Recent Diagnostics: Relevant Laboratory Results / Abnormalities: BUN 34, Crea 2.1, ALT 142, USG 1.014
Current medications (include full name, dosage and frequency): Corydalis 1/2 tab PO BID, Thuja pomade, Super Shrooms 1/2-1 scoop PO q 24 hours, Milk thistles 1 cap PO q 24 hours, Composure, VetriScience Sr Multi Weight 14.7 pounds BodyScor e9 5 - Ideal - 5 Temp 100.6 Pulse 120 Resp 40 CRT <2 sec BP 180/178/180 rlat/6-11cm/rfl
Abnormal PE/Chem/CBC/UA Results: ECG/RADS attached for Keith

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 **kidneys** presented non-specific mild degenerative changes. The right kidney measured 3.65 cm with slight pyelectasia. The kidneys do not appear end stage.

Adrenal Glands

Both **adrenal glands** were visualized and recognized as having normal shape, size, position and echogenicity for this breed. The phrenic vasculature, glandular echogenicity and detail were unremarkable. Capsule, cortex, and medullary definition were normal for this age patient. The right adrenal gland measured 0.55 cm at the cranial pole and 0.42 cm at the caudal pole.

The **left adrenal gland** was slightly irregular with minor heterogeneous changes measuring up to 6.0 mm in width.

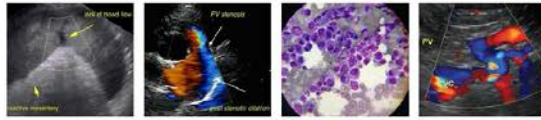
Spleen

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 age-related parenchymal remodeling was noted but likely not clinically significant at this time. Occasional hyperechoic nodule noted, not clinically significant.

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

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/lymphangectasia. The stomach revealed a 1.06 cm hypoechoic mucosal polyp. Full thickness biopsies or endoscopy guided biopsies would be ideal to confirm. No obstructive disease or obvious suspicion of neoplasia. Albumin levels should be monitored periodically.

Pancreas

The base and limbs of the **pancreas** were observed to be largely isoechoic to surrounding omental fat. Some parenchymal remodeling, however, with mild deviation from curvilinear normalcy was observed. Pancreatic duct and capsular irregularities were present consistent with age related changes. If pain upon imaging (+ Murphy sign) was present or if the patient is focally painful in subxyphoid palpation then low-grade smoldering chronic pancreatitis should be suspected.

Free Abdomen

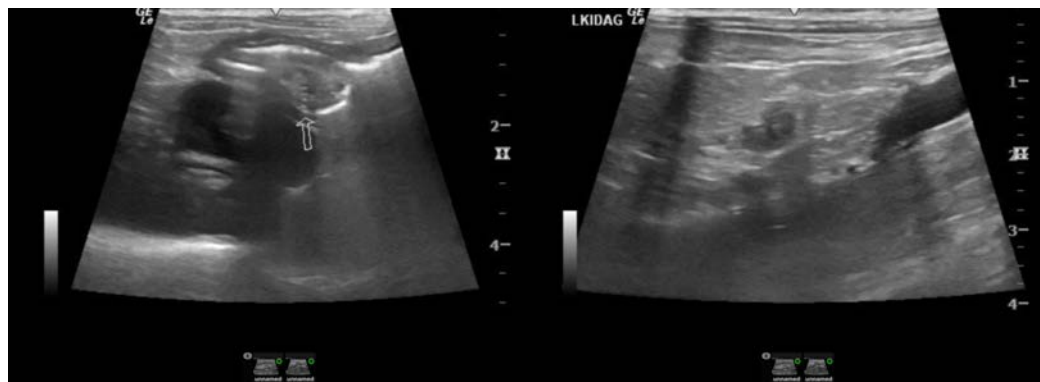
Trace free fluid noted in the abdomen.

ULTRASONOGRAPHIC FINDINGS

- Lymphangiectasia GI pattern with reactive mesentery
- Concurrent gastric mucosal polyp
- Mild non-specific degenerative renal changes with slight pyelectasia
- Low-grade inflammatory hepatopathy – non-specific.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Given the azotemia in this patient, acute insult to both the GI tract and kidneys is likely. Endoscopy warranted for further definition. The albumin levels were not reported to be subnormal. However, this should be monitored carefully. 72-hour IV fluid protocol recommended to treat for azotemia. Assessment for acute renal insult such as Leptospirosis or toxin exposure should be considered in this patient.





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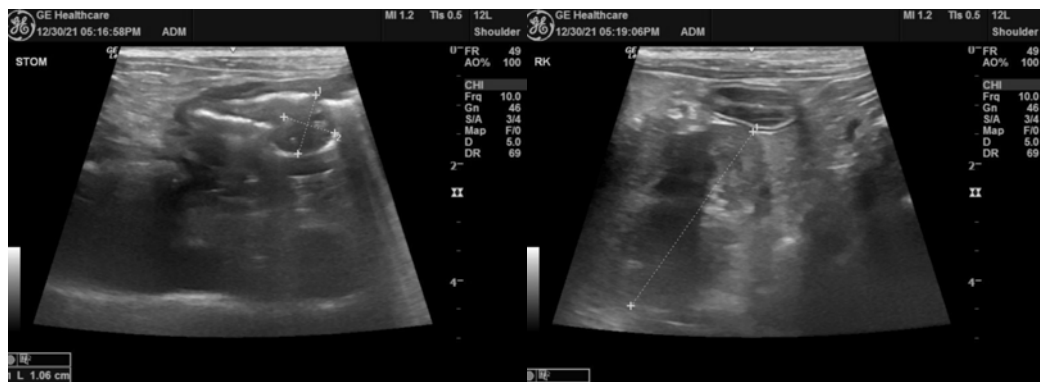
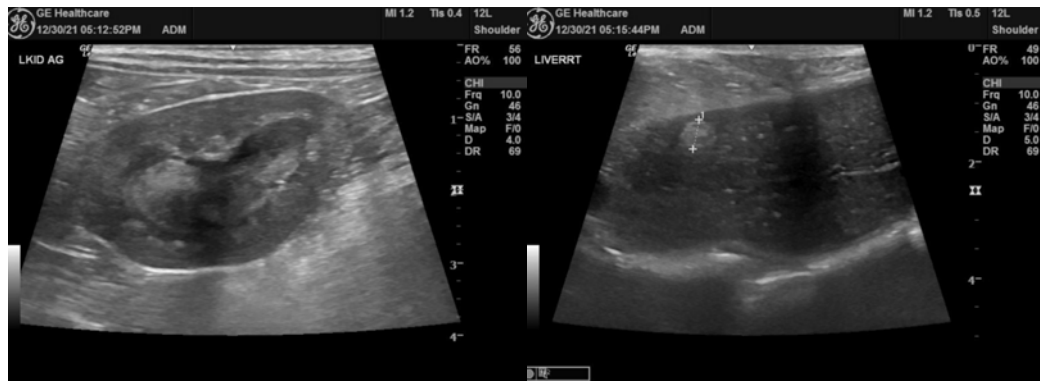
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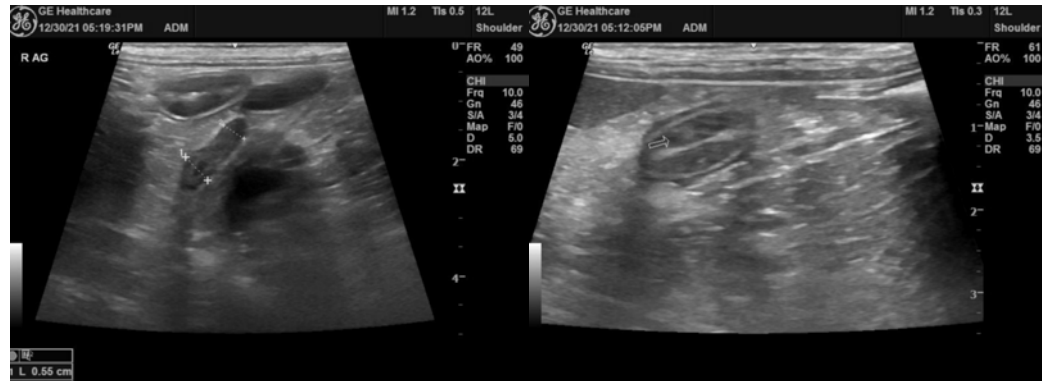
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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
Eric.Lindquist@SonoPath.com