



PATIENT

Humphrey Armstrong

SPECIES

Canine

BREED

Dachshund Mix

SEX

Neutered Male

AGE

12 Years

WEIGHT

20.9 Pounds

INTERPRETED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

IMAGING PERFORMED BY

Jenny Wenrich

HOSPITAL NAME

Straley VA

REFERRING VET

Jenny Wenrich

INVOICE

17497

DATE

9/30/22

PRESENTING CLINICAL SIGNS

History: Lethargy, pendulous abdomen, poor/thin haircoat, 5# weight loss over 1 year

Abnormal PE/Chem/CBC/UA Results: mild anemia, elevated ALKP, mild azotemia, low dose dex suppression test indicated adrenal dependent hyperadrenocorticism, UA indicated pyelonephritis

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 moderate degenerate renal changes with polycystic cortices. The left kidney measured 4.5 cm. The right kidney measured 5.0 cm.

Adrenal Glands

The **right adrenal gland** was enlarged, irregular and heterogeneous, measuring 2.0 cm x 1.8 cm. Capsular expansion was noted without obvious capsular escape or vascular invasion.

The region of the **left adrenal gland** revealed an undifferentiated nodular mass, measuring approximately 2.0 cm x 2.5 cm with irregular out pocking or vascular invasion, possible phrenic invasion. A normal adrenal gland was not evident.

Spleen

The **spleen** was largely smooth with subtle heterogeneous parenchymal changes while maintaining normal echogenic relationship to the liver and kidney. These changes are consistent with normal age-related alteration. The capsule was smooth without noticeable impingement from within the spleen or from pathology in the adjacent abdomen. The splenic vasculature demonstrated normal volume without signs of congestion or significant contraction. No evidence of active acute or chronic inflammatory, neoplastic, or infarctual changes were noted.

Liver

The **liver** revealed a vacuolar hepatopathy pattern with heterogeneous parenchymal changes. The gallbladder was overdistended with thickened wall and suspended debris, consistent with chronic cholangitis.

Gastrointestinal

Significant **gastric** wall thickening was noted with hypertrophied mucosa. Muscularis and submucosa layers appeared intact.

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.



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ULTRASONOGRAPHIC FINDINGS

- Bilateral adrenal enlargement and suspect left adrenal phrenic vein invasion
- Moderate degenerative renal changes with cortical cysts
- Chronic hepatic changes with cholangitis
- Gastric mucosal hypertrophy, likely chronic inflammatory, possibility of underlying gastric neoplasia
- Age-related splenic changes

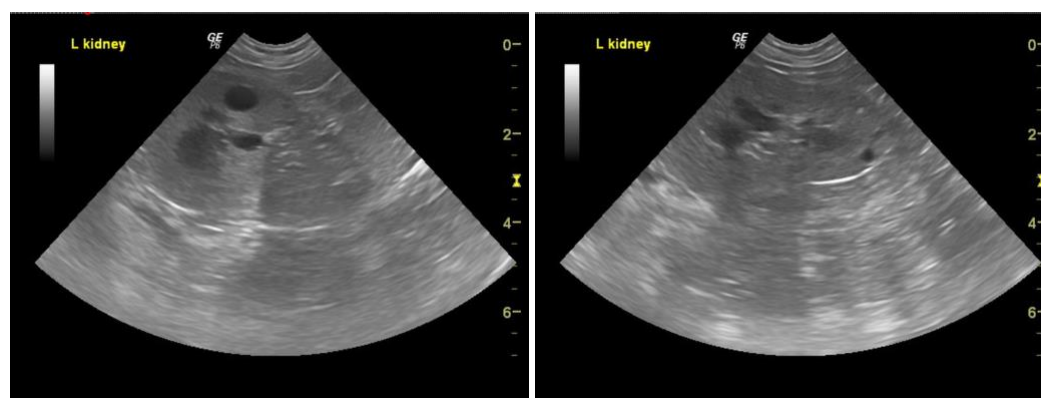
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

CT evaluation of the adrenals would be ideal. Both adrenals are enlarged, assuming the structure near the left adrenal is actually adrenal origin. Carcinoma or pheochromocytoma could be considered. An argument could be made for both PDH and adrenal dependent Cushings, which occasionally can happen or concurrent pheochromocytoma. Blood pressure measurements are indicated.

The cause of weight loss is not overtly evident. Maldigestion panel, three view chest radiographs and full CNS examination is recommended to examine for occult disease that could be responsible for the weight loss. Evaluation for competitive eating environments should also be considered. The anemia could be justified by azotemia or emerging renal failure. 72 Hour IV fluid protocol, blood pressures, urine culture are all indicated. If hypertension is present, then urine catecholamine is indicated. Prognosis is guarded long term. Full CNS examination 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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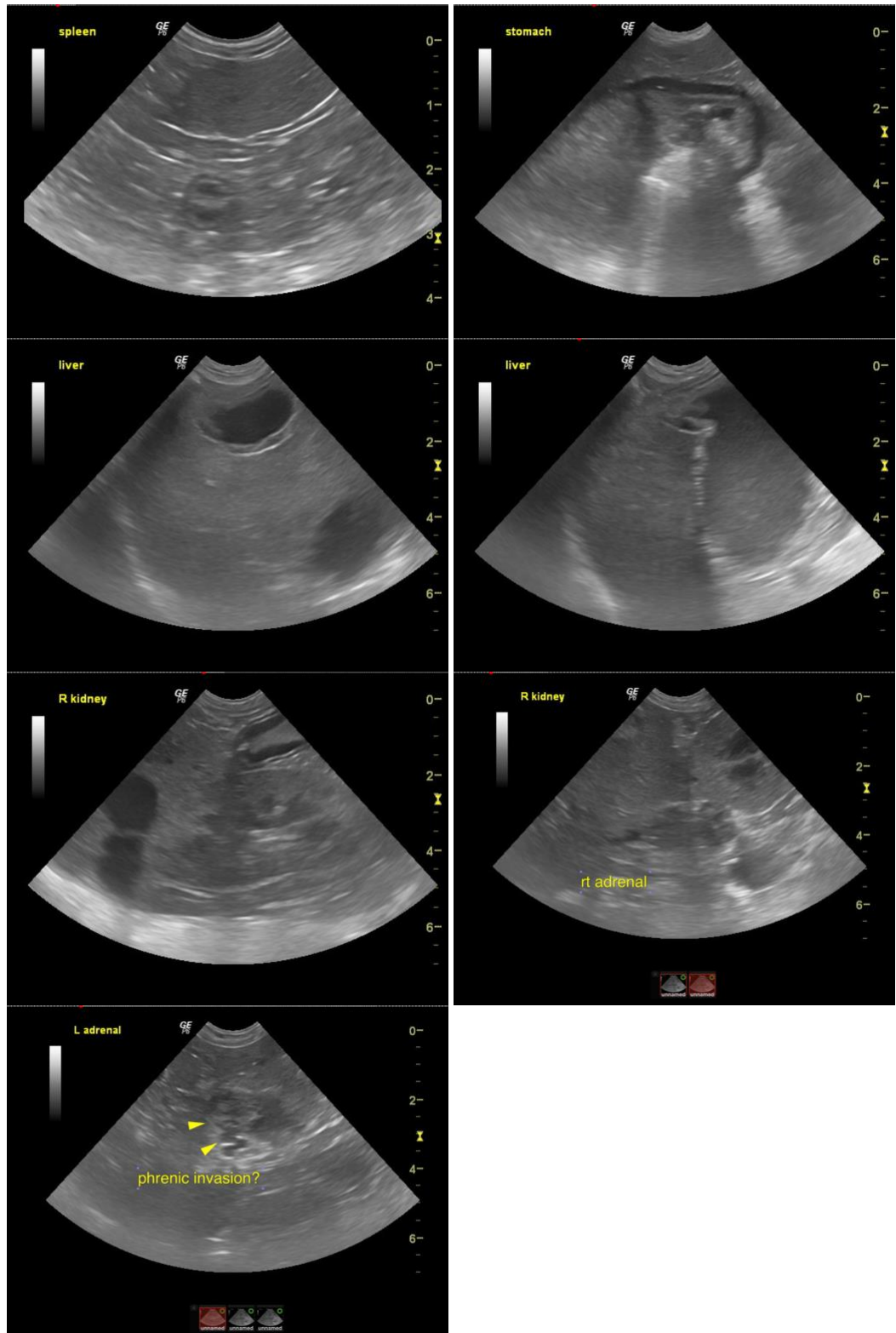
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not



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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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info@SonoPath.com

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