SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
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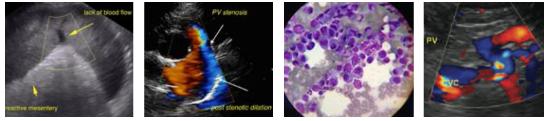


ANIMAL SOUNDS NW
MOBILE VETERINARY ULTRASOUND
IMAGING PERFORMED BY
AnimalSoundsNW.com 541-357-9423

PATIENT
Hank Stavros

SPECIES
Canine

BREED
Sheltie

SEX
Neutered male

AGE
11 years

WEIGHT
31.4 lbs

INTERPRETED BY
Eric Lindquist, DMV, DABVP, Cert. IVUSS

IMAGING PERFORMED BY
Jenna Walsh, CVT

HOSPITAL NAME
Reid VH

REFERRING VET
Dr. Reid

DATE
12/23/21

Invoice
94886

PRESENTING CLINICAL SIGNS

Patient seen at RVH 12/10 for V/D - tx with propectalin and cerenia when slowly added back kibble p had few days of black tarry stool decreased app 12/15 off and on until 12/20 p V 2x again and loose stool normal color p has remained lethargic for 2wks ate some food last night and few bites this morning; been drinking water well p has hx of heart murmur, was on enalapril and has since stopped - no change, no cough per o
Abnormal PE/Chem/CBC/UA Results: Current Medications Tramadol, cerenia injection 12/22, mirtazapine, B12 injection 12/22 Radiographic Findings 1) 2-view Thoracic Radiographs - cardiomegaly (tall) w/ LA enlargement and dorsal deviation of the trachea, mild bronchoalveolar pattern, no pulmonary edema noted 2) 2-view Abdominal Radiographs - decreased serosal detail cranial abdomen, poss mass effect but could be normal pylorus structure, SI and LI appear WNL

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The **urinary bladder**, trigone, and pelvic urethra presented normal thicknesses and normal tone. The pelvic urethra was imaged 2.0 cm beyond the cystourethral junction. 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.

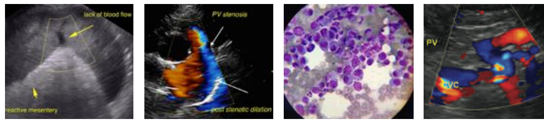
The **kidneys** presented a relatively uniform cortical hyperechogenicity when compared to the renal medulla, spleen and liver. No overt masses were noted. Corticomedullary definition was nebulous and the ratio favored the cortex slightly. The ureters were not visible and assumed to be normal. These changes are most consistent with chronic interstitial nephritis yet infiltrative disease could not be entirely ruled out without biopsy though neoplasia is not suspected. The left kidney measured 5.16 cm. The right kidney measured 5.1 cm with an anechoic cyst in the dorsal cortex.

Adrenal Glands

The right adrenal gland was enlarged and nodular measuring 1.77 x 1.67 cm at the cranial pole and 0.63 cm at the caudal pole. The vena cava was free of evident pathology with no evidence of invasion. The left adrenal gland was mildly heterogenous, yet normal in size and contour measuring 2.47 x 0.77 cm at the caudal pole and 0.61 cm at the cranial pole.

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 was noted.



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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 lipogranulomatous nodule was noted. Vascular and biliary tracts were of normal volume and no evidence of congestion was noted. The gallbladder was unremarkable.

Gastrointestinal

Retention of ingesta was noted in the **stomach**. A grouping of shadowing structures were present in the pyloric outflow. The grouping measured 1.5 cm. This is likely oral medication. Assessment of the oral medication history is warranted. Variable small intestinal thickening was noted with areas of reactive mesentery. This is consistent with enteritis.

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 subxiphoid palpation then low-grade smoldering chronic pancreatitis should be suspected.

ULTRASONOGRAPHIC FINDINGS

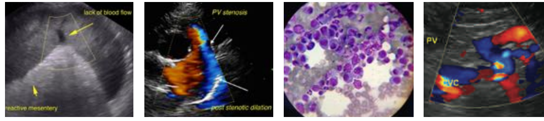
Nodular right adrenal gland and generalized enlargement. Adenoma, hyperplasia, adenocarcinoma and pheochromocytoma are all possible.

Moderate degenerative renal disease with cortical cysts.

Variable intestinal thickening, enteritis, pancreatic remodeling.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Acute on chronic inflammatory bowel is likely in this patient. 24 hour n.p.o., GI protectant protocol and hydrolyzed canned diet is recommended along with broad spectrum anti-parasitic protocol. A recheck sonogram is recommended if clinical signs persist. If the patient appears Cushingoid eventual work-up for adrenal dependent Cushing's is indicated. Blood pressure measurements are warranted if hypertension is present. Urine catecholamine is warranted to assess for pheochromocytoma.



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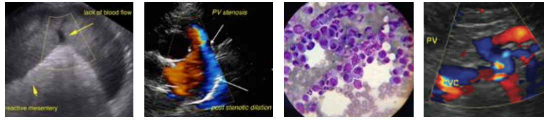

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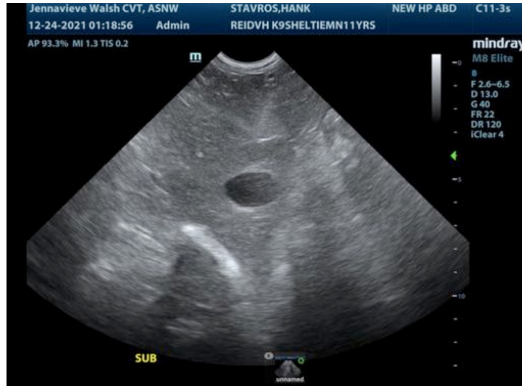

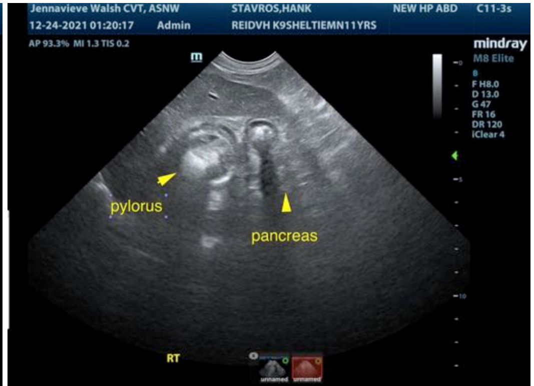

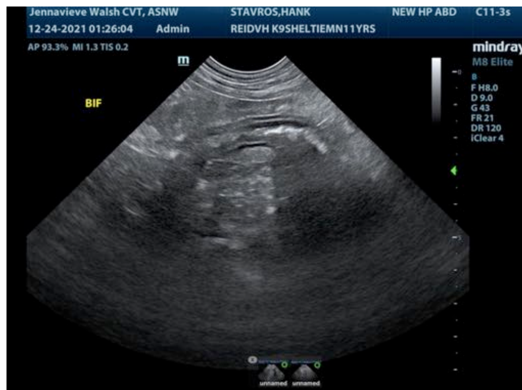

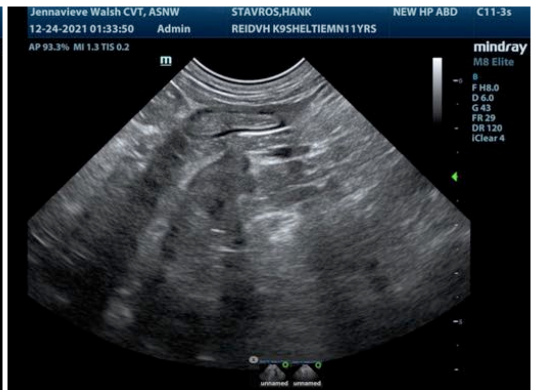

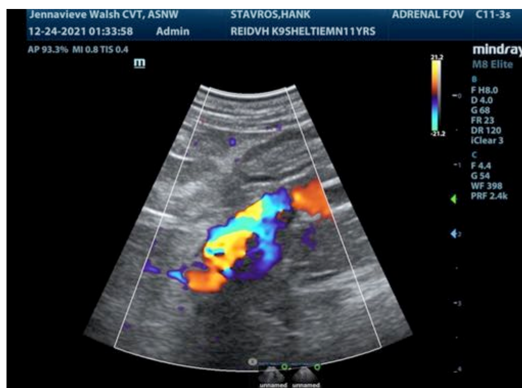

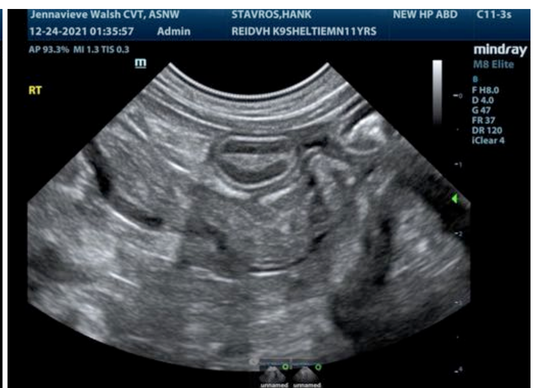

The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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