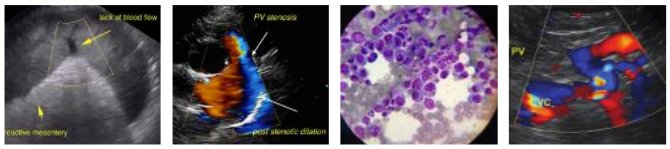
SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™



SonoPath.com
1-800-838-4268 info@sonopath.com

PATIENT
Koko Hill

SPECIES
Canine

BREED
Border Collie Mix

SEX
Neutered Male

AGE
7 Years

WEIGHT
Neutered Male

INTERPRETED BY
Eric Lindquist, DMV DABVP, Cert. IVUSS

IMAGING PERFORMED BY
Dr. Lesley Cohen

HOSPITAL NAME
Willamette VH

REFERRING VET
Dr. Lesley Cohen

INVOICE
17900

DATE

PRESENTING CLINICAL SIGNS

History: Originally presented 11/3/22 for weak urination stream, dripping u, e/d wnl, diagnosed with UTI, mild ALT increase, transudate in abdominal. Tx with clavamox. Presented today 11/7/22 having green urination, hyporexia, vomiting 12hr duration.

Abnormal PE/Chem/CBC/UA Results: A-fast = moderate free fluid around urinary bladder, kidneys and liver. UB very large with hyperechoic sediment, no obvious uroliths. Abdominocecentesis = clear fluid, transudate Placement of red rubber urinary catheter - able to eventually pass a 8Fr catheter using hydropulsion to dislodge many small green uroliths (urate?), removed approx 1.5L of green urine from bladder 2 view pelvic rads = no urethroliths seen EPOC = Crea 0.3 (L), BUN 5 (L), all other wnl. K 3.6 Chem10 = BUN 4 (L), ALB 2.1 (L), rest wnl. ALT 105, ALP 99 **serum not icteric UA (via red rubber catheter) = USG 1.026, Bili 3, pH 6.5, WBCs 9/hpf, unclassified crystals, ammon biruate crystals Tbili 0.4 mg/dL PT 19.0s (elevated), PTT 105.0s (elevated)

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The **urinary bladder** presented a large amount of dependent debris and sand, an accumulation of which measured approximately 5.0 cm. Slight amounts of free fluid were noted around the urinary bladder, may be owing to overdistention and should be monitored carefully and ideally, sampled. Iliac trifurcation was unremarkable.

The **kidneys** revealed normal size and structure, corticomedullary definition and ratio for this age. The cortices presented largely uniform texture with normal echogenic relationship to liver and spleen. Medullary structure differed distinctly from the cortex and no evidence of pelvic dilation was present. The capsules were acceptably uniform without significant irregularities. The right kidney measured 8.78 cm. The left kidney measured 7.83 cm.

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 left adrenal gland measured 0.5 cm.

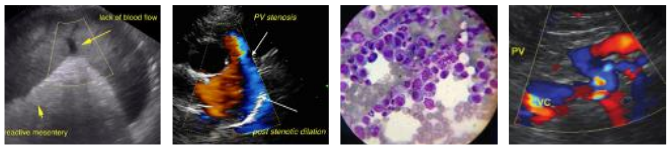
Spleen

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. Caudal folding of the spleen was noted.

Liver

The **liver** was subnormal in size. The gallbladder and common bile duct were unremarkable, other than mild overdistention of the gallbladder, possibly owing to anorexia or NPO status. The vena cava appeared dilated, measuring 7.0 cm. No obvious portosystemic shunting was noted yet cannot be completely ruled out.

Gastrointestinal



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A minor amount of **gastric stasis** was present. The small intestine and colon were unremarkable.

Pancreas

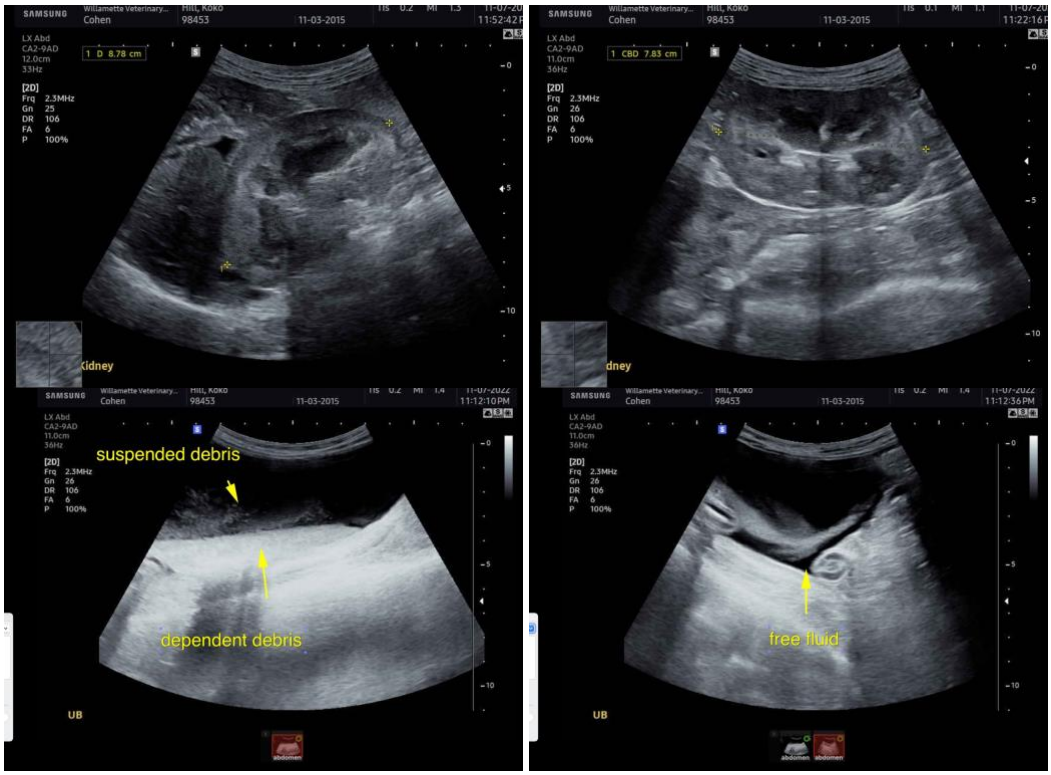
The base and limbs of the **pancreas** were observed to be largely isoechoic to surrounding omental fat. Pancreatic duct and capsular contour were acceptably normal and parenchyma respected normal curvilinear patterns. No overt evidence of active inflammatory or neoplastic disease was noted.

ULTRASONOGRAPHIC FINDINGS

- Microhepatica with dilated hepatic veins
- Urinary bladder debris
- Ascites, possibly owing to passive congestion
- Gastric stasis

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

There is a possibility of intrahepatic shunting. The right branch of the portal vein appeared irregular; however, further imaging would be necessary. I believe there are multiple issues in this patient. I recommend bile acid profile, supportive care, abdominocentesis of the free fluid with cytospin and full urinary work up. If bile acids are elevated, CT with contrast would be indicated to assess for portosystemic shunting. Only minimal urethra was imaged in this patient, further deep urethral images are recommended yet no obstructive pattern was noted. Possibility of a right divisional intrahepatic shunt, where the right branch of the portal vein connects with the vena cava, however, I could not definitively diagnose this potential anomaly. The free fluid may be secondary to overdistention of the bladder, passive congestion or inflammatory based fluid.



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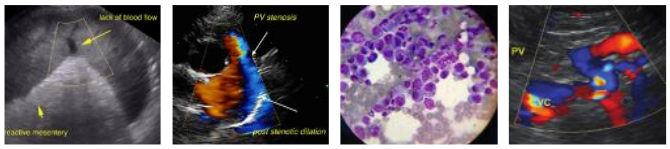

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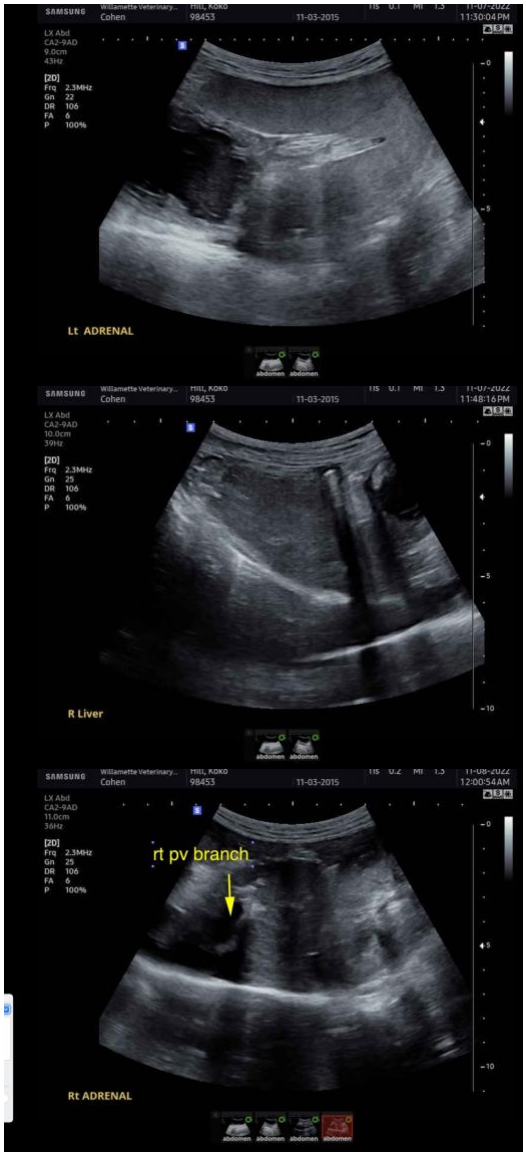

The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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