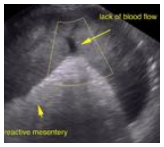
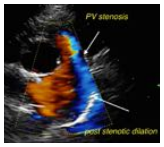
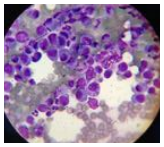
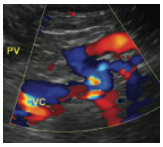
SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™

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

PATIENT
Rocky Proudfoot

SPECIES
Canine

BREED
Yorkie

SEX
Neutered male

AGE
14 years

WEIGHT
11 lbs

INTERPRETED BY
Eric Lindquist, DMV DABVP, Cert. IVUSS

IMAGING PERFORMED BY
Chaley Hunt LVT

HOSPITAL NAME
Columbia AC

REFERRING VET
Dr. Baker

INVOICE
40167

DATE
10/19/22

PRESENTING CLINICAL SIGNS

History: Maintenance ultrasound. History of elevated liver values, pancreatitis, IBD, and adrenal mass on left adrenal gland. Meds: PancrePlus, Ursodiol, Cobalequin, Enalapril, Proviable
Abnormal PE/Chem/CBC/UA Results: Feb '22: Urine Cortisol/Creat ratio: 63

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The **urinary bladder** is largely normal with a trace amount of sand localized to the cystourethral junction at the time of the sonogram.

The **kidneys** revealed largely normal size and structure, corticomedullary definition and ratio (cortex 1/3 of medulla) were essentially maintained with some age-related loss of curvilinear patterns regarding the capsule and C/M junction. The cortices presented largely uniform texture with some increased echogenicity expected for his age patient. Medullary structure differed distinctly from that of the cortex and no evidence of pelvic dilation was present. The left kidney measured 4.12 cm. The right kidney measured 3.69 cm.

Adrenal Glands

The left **adrenal gland** is enlarged and measured 1.23 x 1.17 cm. An expansive nodule was noted at the caudal pole. The cranial pole measured 0.62 cm. The region of the right adrenal gland was imaged with no evidence of pathology. This is likely atrophied owing to negative feedback.

Spleen

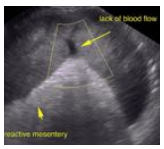
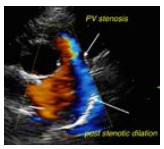
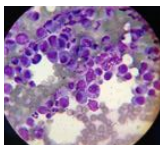
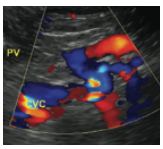
The **spleen** presented a smooth homogeneous parenchyma hyperechoic to liver and renal cortical parenchyma. The capsule was smooth without noticeable expansion or deviation from within the spleen or adjacent pathology. The splenic vasculature demonstrated normal volume without signs of congestion or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

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. Vascular and biliary tracts were of normal volume and no evidence of congestion was noted. A 0.85 x 0.81 cm gallbladder polyp was noted in this patient. This is not pathological and appears stable and non-obstructive.

Gastrointestinal

The **gastrointestinal tract** revealed minor variable thickening and echogenic submucosal changes most consistent with low grade end result of chronic GI disease such as IBD and may be related to

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malassimilation of nutrients if any weight loss is present. No obvious neoplastic patterns were noted and luminal content as 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

Enlarged, nodular left adrenal gland. Differentials include adenoma, adenocarcinoma, pheochromocytoma, etc.

Moderate degenerative renal changes. Occasional cortical cyst and renal mineralization noted with slight pyelectasia.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The patient is likely passing calculi periodically from the kidneys to the bladder. Blood pressure measurements are warranted. If urine specific gravity is less than 1.020 then work-up for adrenal dependent Cushing's is indicated. The left adrenal gland appears resectable.

Efficient & Accurate Cushing's Work up-Lindquist

Notes regarding Cushing's Clinical Presentations:

Nearly all Cushing's dogs have SAP elevations and true PU/PD (USG < 1.025) and most are polyphagic.
Cushing's dogs are > 6 years and usually > 9 years old, usually have poor skin coats, body scores > 3/5, and are usually sedentary animals.
Its important to remember that Cushing's dogs usually look and play the part and other diseases cause false + stress related cortisol spikes. On rare occasion a Cushing's dog will not follow the rules but this is truly an exception.
Potential Cushing's patient workups can be costly and frustrating if not definitive and, in my experience, the non-definitive patient usually has something else going on that may be contributing to some of the clinical signs a Cushing's dog will have, especially SAP elevations or PU/PD. Based on this prelude of information I came up with the following algorithm in the spirit of diagnostic efficiency. The following suggested protocol is based on current available literature on Cushing's disease and extensive clinical-sonographic experience evaluation + Cushing's and False + LDDST & ACTH stim. cases in order to maximize the efficiency of a Cushing's workup in practice.

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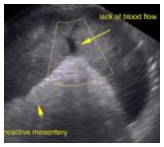
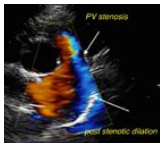
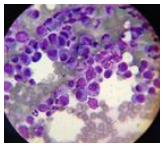
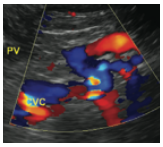

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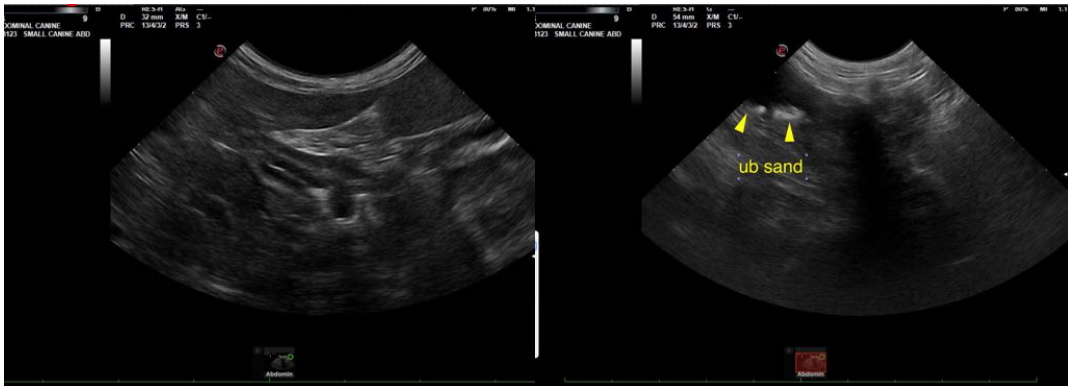

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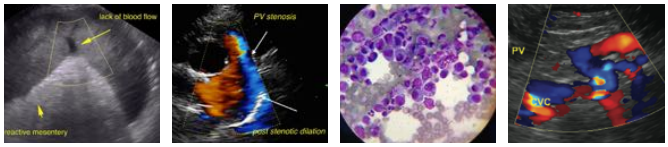

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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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