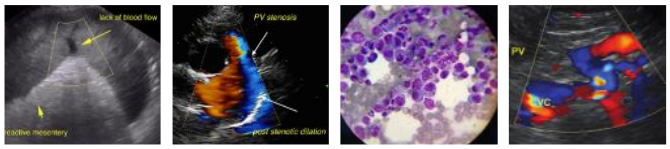
SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™



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

PATIENT

Ava Winkler

SPECIES

Canine

BREED

Yorkie

SEX

Spayed Female

AGE

8 Years 10 Months

WEIGHT

7.80 Pounds

INTERPRETED BY

Eric Lindquist, DMV DABVP, Cert. IVUSS

IMAGING PERFORMED BY

Dr. Ellen Puthoff

HOSPITAL NAME

Kings VH

REFERRING VET

Dr. Ellen Puthoff

INVOICE

16634

DATE

7/15/22

PRESENTING CLINICAL SIGNS

History: History for Sonopath: Ava has >1 year history of pollakiuria without polydipsia, straining or abnormalities to the urine. Ultrasound performed at referral center in 2021 (for unrelated reason) revealed dystrophic mineralization of the urinary tract. Bloodwork and urinalysis performed 7/12/2022 were unremarkable - recommended ultrasound to assess the urinary tract again to see if mineralization is present to an extent that could potentially lead to her pollakiuria. I apologize for the abnormal order of the ultrasound - I was worried that she would lose patience so prioritized urinary tract over remainder of abdomen. Imaged left kidney, bladder, right kidney, then liver, spleen, intestines

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The **urinary bladder** revealed concentric mural thickening. Wall thickness measured up to 4.0 mm. Anechoic urine was present. This change is consistent with cystitis. The pelvic urethra was imaged 1.0 cm beyond the cystourethral junction.

The **kidneys** revealed diffuse hyperechoic cortical remodeling with hyperechoic rim and loss of corticomedullary definition. Pinpoint mineralizations were noted in the left kidney. The left kidney measured 3.0 cm. The right kidney measured 3.0 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.

Spleen

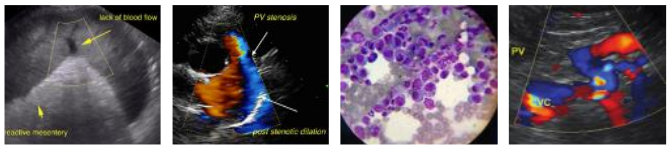
The **spleen** presented a smooth homogeneous parenchyma hyperechoic to liver and renal cortical parenchyma. The capsule was smooth without noticeable expansion or deviation from within the spleen or adjacent pathology. The splenic vasculature demonstrated normal volume without signs of congestion or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

Liver

Exam of the cranial abdomen demonstrated excessive **liver** size, swollen contour, with conserved uniform architecture. Parenchymal echogenicity was diffusely isoechoic to the spleen and falciform fat. This type of liver presentation typically is associated with slow and gradual SAP elevations with low-grade ALT rise. USG-FNA sampling is encouraged if more aggressive LE profiles are present such as ALT > 200 or rapid rise in SAP. These presentations are usually reactive hepatopathies owing to other disease processes either endocrine (Diabetes, Hypothyroidism, Cushing's disease), "antigen surveillance" from the gut/pancreas, or idiopathic breed predisposed progressions.

The **gallbladder** was mildly over distended with suspended and dependent debris, yet not to the level of emerging mucocele, yet sludge appears to be mildly excessive. No adjunctive inflammation was noted.

Gastrointestinal



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There was some residual chyme and gas was noted in the **stomach**, yet not pathological. This is consistent with end post prandial presentation. Transit of chyme into the small intestine was normal. Curvilinear patterns were maintained throughout the GI tract. No evidence of pathology. Small and large intestine demonstrated normal luminal chyme and stool consistency respectively. No obstructive or overt infiltrative disease was noted. No associated abnormal lymphatic activity was noted.

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

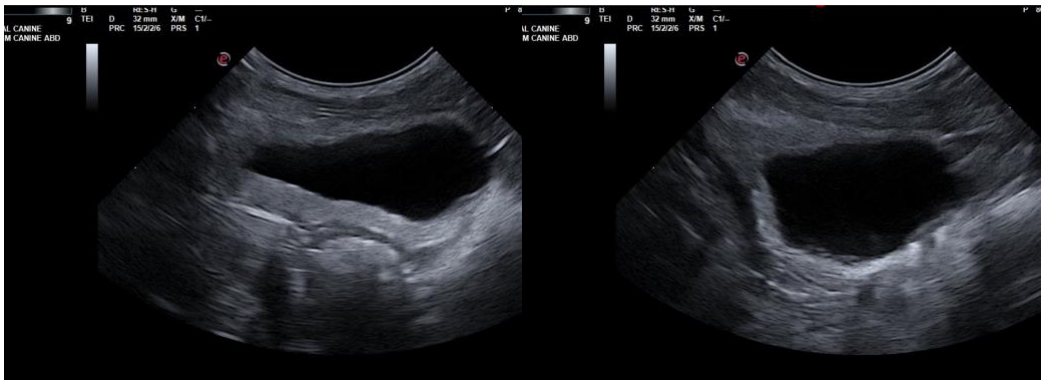
- Hyperechoic cortical kidney remodeling with hyperechoic rim
- Urinary bladder wall thickening, consistent with cystitis
- Hepatopathy and gallbladder sludge
- Partially full stomach

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

I'm most concerned about long term viability of the kidneys in this patient. A history of renal insult is likely. Full urine culture and sensitivity indicated. Assessment of BUN, creatinine values and blood pressure are all indicated. Prognosis is guarded long term. The patient may be passing small calculi periodically, also contributing to the clinical signs.

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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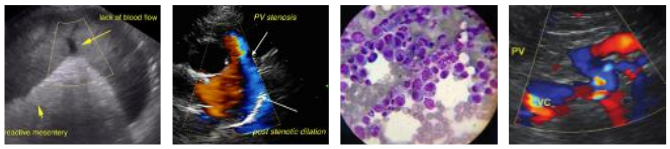

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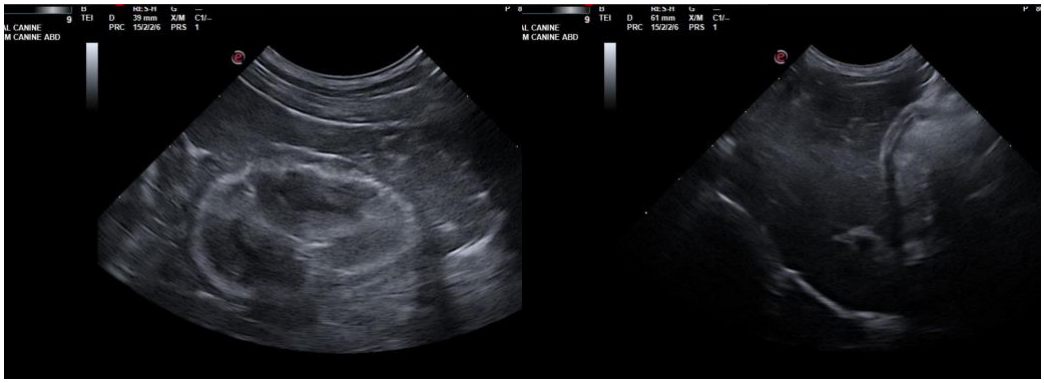

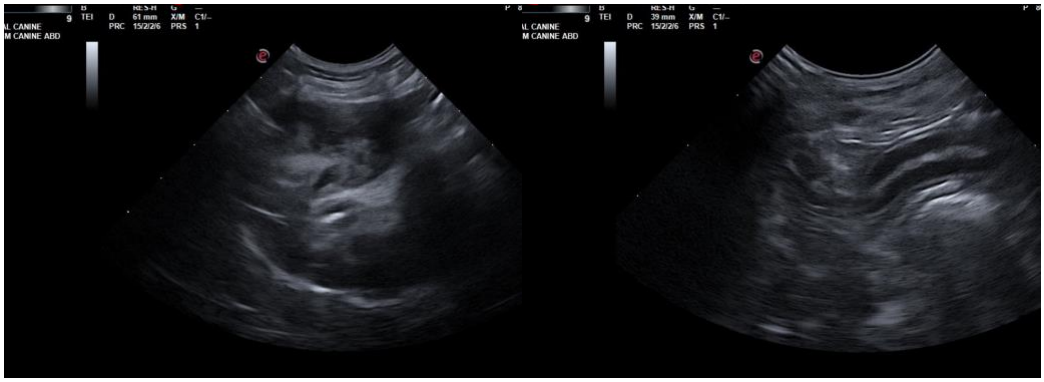

The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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