



**PATIENT PRESENTING CLINICAL SIGNS**

Koko Stang Drinking a lot, dry skin. Just started T4 supplement  
U/A RBC's, WBC's, normal concentration. B/W assumed ok. 2 nd opinion.

**SPECIES**

Canine

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**Urinary System**

**BREED**

Canine

The **urinary bladder** revealed concentric mural thickening with a minimal amount of urine present at the time of the sonogram. Bladder sand was also noted.

**SEX**

Spayed Female

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 this age patient. Medullary structure differed distinctly from that of the cortex. Pyelectasia was noted in the left kidney with echogenic debris. The left kidney measured 8.2 cm.

**AGE**

11 years

**Adrenal Glands**

**WEIGHT**

100 lbs

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 3.13 x 0.67 cm at the cranial pole and 0.73 cm at the caudal pole.

**INTERPRETED BY**

Eric Lindquist, DMV  
DABVP, Cert. IVUSS

**Spleen**

**IMAGING PERFORMED BY**

Dr. Hunt

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.

**HOSPITAL NAME**

Bayshore VH

**Liver**

**REFERRING VET**

Dr. Hunt

The **liver** was uniformly swollen with minor, excessive gallbladder debris and over distension with dependent and suspended bile without evidence of overt mucocele formation. However, excessive sludge was present. The liver presented coarse architecture with mildly increased portal markings and subtle, mixed echogenic changes. This is consistent with vacuolar hepatopathy and some level of remodeling and history of inflammatory component. There was no overt suspicion of neoplasia.

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**Gastrointestinal**

**DATE**

2/8/22

Examination of the **gastrointestinal tract** revealed a stomach and intestine free of stasis, of normal wall thickness, acceptable curvilinear mural detail, and peristaltic activity. Small and large intestine



**PATIENT** demonstrated normal luminal chyme and stool consistency respectively. No obstructive or overt infiltrative disease was noted. No associated abnormal lymphatic activity was noted.

Koko Stang

**SPECIES** *Pancreas*

Canine 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.

**BREED**

Canine

**ULTRASONOGRAPHIC FINDINGS**

**SEX** Bladder sand, chronic cystitis pattern.

Spayed Female Pyelonephritis renal pattern.

Vacuolar hepatopathy.

**AGE**

11 years

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

**WEIGHT**

100 lbs

Urine culture and sensitivity along with 72-hour IV fluid protocol is recommended along with injectable antibiotics based on culture results. The bladder wall thickening is most consistent with chronic cystitis. However, early transitional cell carcinoma cannot be completely ruled out. Cytospin and free catch urine sample is recommended to assess pathological cytology. Given that this is a female a 72-hour IV fluid protocol may allow for dissolution of the bladder sand and reevaluation of the bladder wall from a sonographic perspective with a full bladder as well as flushing out the renal pelvises.

**INTERPRETED BY**

Eric Lindquist, DMV DABVP, Cert. IVUSS

**Canine Chronic UTI Protocol**

I recommend **Enrofloxacin** (5-10 mg/kg SID PO) (In patients > 1 year of age) in late pm after urination to maximize urinary concentrations overnight. This assumes that culture supports this use. Repeat **culture** at 3-4 weeks and continue treatment at least 7-10 days post negative urinary sediment and negative culture. *Note: Negative culture does not necessarily mean lack of UTI.* Other favorite antibiotics for chronic UTI include third generation Cefa (Ceftiafur or similar s.i.d. injectable) or Clavamox. If suspicion of occult urinary incontinence is present then **phenylpropanolamine (PPA)** (1-2 mg/kg BID) can be employed long term to enhance urethral tone.

**IMAGING PERFORMED BY**

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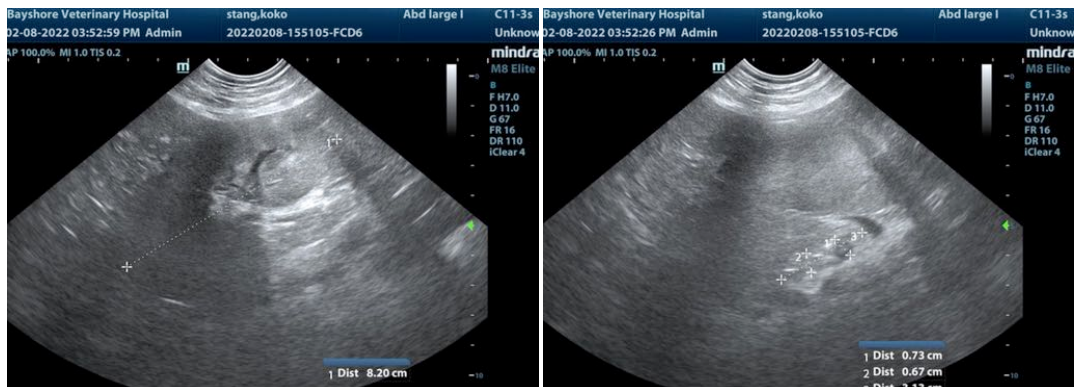
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**PATIENT**

Koko Stang

**SPECIES**

Canine

**BREED**

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**SEX**

Spayed Female

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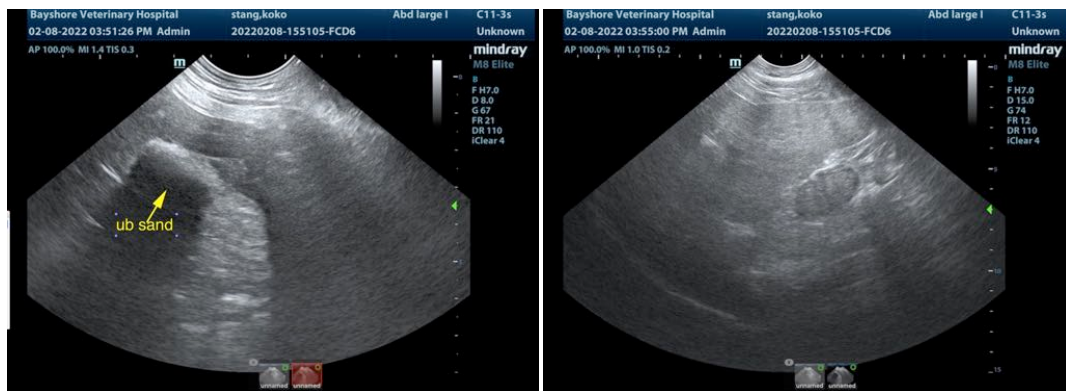
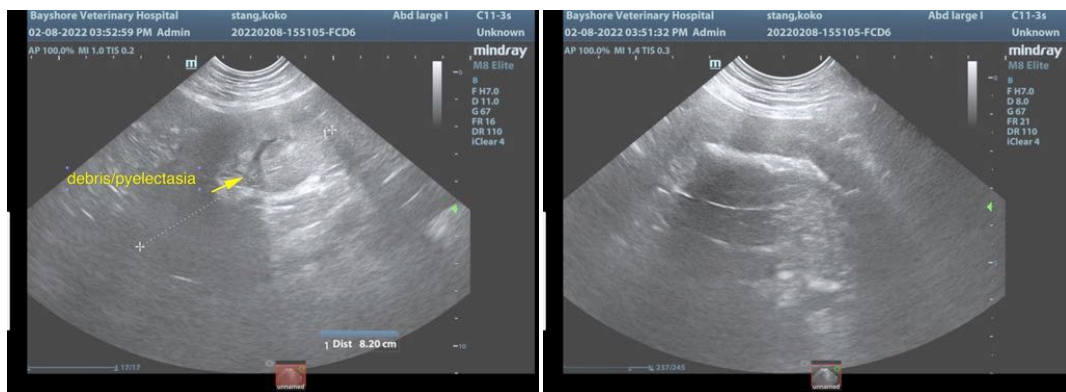
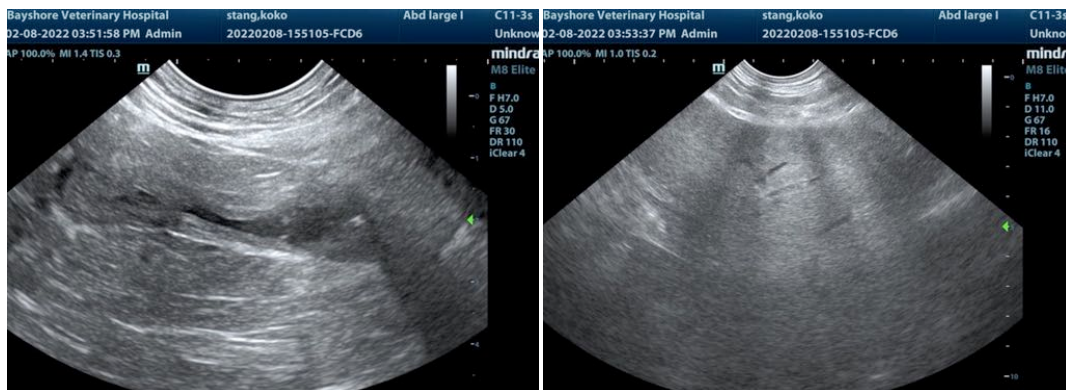
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.



**PATIENT**

Eric Lindquist, DMV, DABVP, Cert. IVUSS, CEO of SonoPath.com  
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Canine

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**SEX**

Spayed Female

**AGE**

11 years

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