



PATIENT

Zoe Glynn

SPECIES

Canine

BREED

Shepherd x

SEX

Spayed Female

AGE

13 Years

WEIGHT

47

INTERPRETED BY

Eric Lindquist, DMV,
DABVP (CFM), Cert.
IVUSS

IMAGING PERFORMED BY

JK

HOSPITAL NAME

Hamburg Veterinary
Clinic

REFERRING VET

Dr. Branning

INVOICE

74039

DATE

3/26/26

PRESENTING CLINICAL SIGNS

Urinary infections, weight loss, slightly elevated liver values.

Abnormal PE/Chem/CBC/UA Results: ALT 124, ALP 202 Urine WBC 20-30 PF, EPITHIAL CELLS, 4+ PROTEIN,

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

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

The iliac trifurcation was unremarkable.

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. Left kidney measured 6.16 cm. Right kidney measured 6.5 cm.

Adrenal Glands

The **right adrenal gland** was 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. Right measured 2.26 cm x 0.50 cm.

The **left adrenal gland** was mildly enlarged and slightly irregular, measuring 1.4 cm at the cranial pole and 0.94 cm at the caudal pole.

Spleen

The **spleen** was largely smooth with subtle heterogeneous parenchymal changes while maintaining normal echogenic relationship to the liver and kidney. These changes are consistent with normal age-related alteration. The capsule was smooth without noticeable impingement from within the spleen or from pathology in the adjacent abdomen. The splenic vasculature demonstrated normal volume without signs of congestion or significant contraction. No evidence of active acute or chronic inflammatory, neoplastic, or infarctual changes were noted.

Liver

The **liver** images submitted revealed subjectively normal liver size, contour, and structure. Parenchymal echogenicity was naturally coarse and hypoechoic to the spleen. Vascular and biliary tracts were of normal volume with no evidence of congestion. 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 adjunitive inflammation was noted.



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Gastrointestinal

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 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

- Slightly enlarged left adrenal gland.
- Mild excessive gallbladder debris.
- Age related renal and splenic changes.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

No evidence of lower urinary tract disease or cause of weight loss. If USG is <1.020 and the patient appears cushingoid, workup for Cushing's indicated. Examination of the vaginal vestibule for predisposing issues also warranted.

Below is to be utilized for UTI with chronic urinary tract changes found sonographically that may serve as nidus of infection and history of chronic or recurrent UTI is an issue.

I recommend Clavamox as a first level approach to chronic UTI at 12.5-25 mg/kg bid owing to optimal urinary concentrations. If bacterial resistance is an issue then **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 (Ceftiofur 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.

UTI Types

Guidelines for management of UTIs. The Veterinary Journal 247 (2019) 8-25

- Sporadic Bacterial Cystitis** - simple, uncomplicated UTI, hematuria, pyuria, bacteria. Dogs and older cats primarily. Tx analgesic + Ab-clavamox or similar 3-5 days. No effect? Ensure no comorbidity or C/S result non compatible
- Recurrent Bacterial Cystitis** - 3+ episodes within 12 months. Look for underlying cause. Incontinence, recessed vulva/pyoderma, prostatitis, calculi, neoplasia, resistant bacteria. Analgesia, and culture and refine AB Tx up to 14 days. Culture 5-7 days after stopping Tx.
- Upper UTI** - Pyelonephritis, ascending or embolic. Comorbidity check for diabetes, cushings, lithiasis, prostatitis, neoplasia. Fever, Lethargy, PU/PD, painful kidney on clinical exam. Tx Fluoroquinolone (Marbo/enro not cipro) or Cefa (Naxcel injectable in larger dogs), C/S, tx up to 4-6 weeks (debate). Culture 1-2 weeks after stopping AB.
- Subclinical Bacteruria** - Commensalism, treatment debatable and variable depending on scan.
- EL recs** - scan, evaluate, Tx AB 5-7 days negative sediment + negative culture. Clavamox, Cefa, Quinolone



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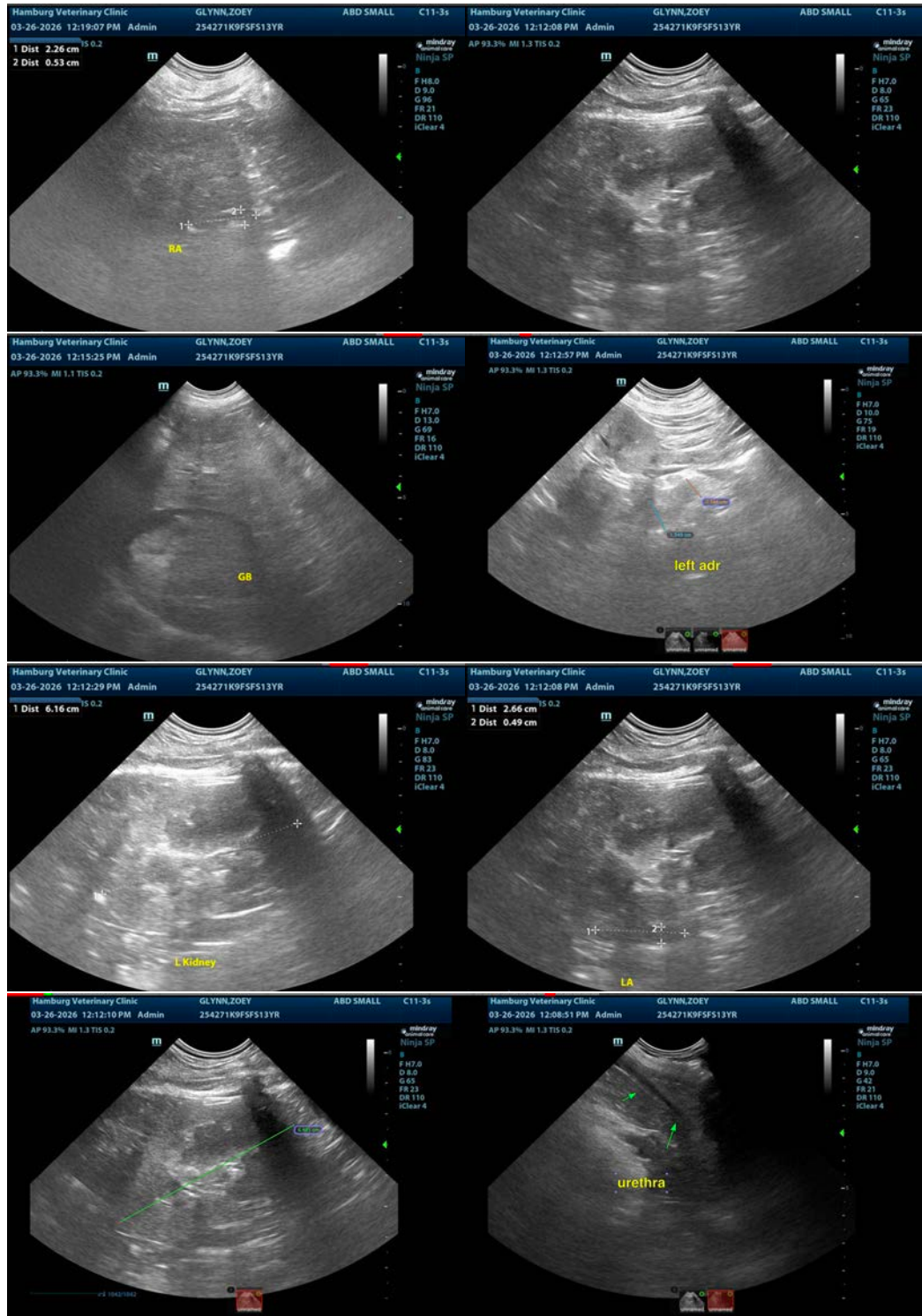
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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(CFM), Cert. IVUSS,
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