



PATIENT

Zooger Wrazen

SPECIES

Canine

BREED

JRT x

SEX

Neutered Male

AGE

11 Years 7 Months

WEIGHT

28.6 lbs

INTERPRETED BY

Greg Kuhlman, DVM,
DACVIM (SAIM)

IMAGING PERFORMED BY

Jenni Tudini, MRCVS,
SDEP Certified (Abd)

HOSPITAL NAME

East Aurora Veterinary
Hospital

REFERRING VET

Dr. Sara Huckabone

INVOICE

72982

DATE

2/13/26

PRESENTING CLINICAL SIGNS

Patient has become acutely unwell with lethargy, hyporexia, vomiting and some diarrhea that started 2 weeks ago. No PU/PD is noted, no c/s.

Over the last 2 weeks since initial hematological findings were noted and patient has been receiving epakatin, SQ fluids (unable to pursue In Hosp IVF), convenia and cerenia that has been only mild improvement in general demeanor and vomiting has lessened but otherwise patient remains lethargic and the hyporexia remains

Abnormal PE/Chem/CBC/UA Results: QAR, mm pink, tacky but CRT < 2 sec, thoracic ausc unremarkable but a little harsh after PVP's (appeared to be referred pharyngeal noise), abdominal palpation unremarkable, all peripheral LN's WNL - Biochem 02/04/26: CREA 3.1 (0.5-1.8), BUN 11 (7-27), Phos 13.7 (2.5-6.8), ALKP 284 (23-212), GGT 14 (0-11) - CBC 02/04/26: Increases in MCV, MCH, MCHC, lymphopenia noted 0.46 (1.05-5.1) - 02/06/26: Biochem - no appreciable changes to prior results -4Dx: NEG x 4 - U/a: Hematuria, presence of cocci/rods and WBC's ++ - Right lateral thoracic radiograph taken prior to scan for screening purposes: unremarkable

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The bladder is moderately distended with urine that contains a moderate amount of suspended echogenic debris consistent with pyuria from patient's reported urinary tract infection. The bladder wall is normal in appearance and thickness. No masses are seen.

The right kidney presents normal size (6.0 cm) with normal shape and architecture. Moderate loss of corticomedullary distinction. Several hyperechoic shadowing nephroliths are present in the renal pelvis.

The left kidney presents normal size (5.5 cm) with normal shape and architecture. Mild to moderate loss of corticomedullary distinction. Mild renal pelvic dilation noted at 9.7 mm x 3.5 mm. There are several hyperechoic shadowing nephroliths present within the renal pelvis that may be causing the renal pelvic dilation due to a partial obstructive process. Pyelonephritis cannot be ruled out.

Adrenal Glands

The adrenal gland was not visualized.

The left adrenal gland presents normal shape and homogenous parenchyma. The phrenic vasculature is unremarkable. The cranial pole measures 4.3 mm and the caudal pole measures 3.8 mm.

Spleen

The spleen is diffusely normal in size. It has an overall mottled echotexture. There is some spontaneous contrast within the splenic vein seen on this exam. No cause is identified. There are pinpoint hyperechoic foci throughout the spleen as well, most likely pinpoint benign myelolipomas.

Liver

The liver is diffusely mildly enlarged and hyperechoic, consistent with patient's mildly elevated ALP. There are multifocal hypoechoic ill-defined lesions throughout the patient's liver. A representative lesion was measured and found to be 7.4 mm x 14.1 mm. These are most likely benign regenerative nodules. A neoplastic etiology for these lesions seems unlikely.



PATIENT

Zooger Wrazen

SPECIES

Canine

BREED

JRT x

SEX

Neutered Male

AGE

11 Years 7 Months

WEIGHT

28.6 lbs

INTERPRETED BY

Greg Kuhlman, DVM,
DACVIM (SAIM)

IMAGING PERFORMED BY

Jenni Tudini, MRCVS,
SDEP Certified (Abd)

HOSPITAL NAME

East Aurora Veterinary
Hospital

REFERRING VET

Dr. Sara Huckabone

INVOICE

72982

DATE

2/13/26

The gallbladder is significantly abnormal. The gallbladder wall is moderately thickened at 4.0 mm in width. The wall has a mixed hyperechoic and hypoechoic pattern to it. There is a marked amount of gravity dependent aggregating echogenic debris within the gallbladder, and there appears to be hyperechoic fat surrounding the gallbladder. No free fluid is seen around the gallbladder. In another view of the gallbladder, it does appear that the gallbladder is an early mucocele.

Gastrointestinal

The stomach contains a small amount of partially digested food. Overall, the stomach wall appears normal in thickness and layering. It is possible the patient has mild gastritis. The intestines have normal wall layering and thickness. Colon contains normal contents with normal wall thickness.

Pancreas

The visible pancreas is normal in size with normal echogenic parenchyma and surrounded by normal peri-pancreatic mesentery.

Free Abdomen

There are no enlarged abdominal lymph nodes seen on this exam. No free abdominal fluid is seen.

Omentum appears hyperechoic, consistent with an inflammatory process.

ULTRASONOGRAPHIC FINDINGS

- Chronic kidney disease with nephrolithiasis.
- Urinary bladder debris.
- Possible mild gastritis.
- Vacuolar hepatopathy pattern.
- Early gallbladder mucocele.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

At this time, given that the patient's creatinine is elevated at 3.1 mg/dl and patient's phosphorus is also elevated at 13.7, there is strong concern that the patient is having an acute on chronic episode of renal disease. It is reported that the patient is 4dx negative, so Lyme disease does not appear to be the cause. Given that both rods and cocci were seen on urinalysis, the patient is strongly suspected of having pyelonephritis. Recommend treating the patient aggressively with intravenous fluids to determine if renal function can be recovered, as well as aggressive antibiotic therapy. Ultimately, we should determine the appropriate antibiotic based off a urine culture and antibiotic sensitivity, which should be submitted. I would start the patient on Clavamox pending those results with a plan to treat the patient for a total of 30 days, and then rechecking urine culture 5 days after the patient finishes the course of antibiotics.

Also recommend obtaining a systemic blood pressure via doppler if possible to determine if hypertension is present. If so, treat with amlodipine at 0.1 mg/kg twice daily. Once patient is stabilized, recommend full staging, monitoring and managing per the International Renal Interest Society guidelines. If the patient is not currently on a urinary diet such as Royal Canin SO or Hills CD, once patient has their appetite return, we would recommend a urinary diet to hopefully prevent progression of the nephroliths seen.



PATIENT

Zooger Wrazen

Recommend treating for gastritis supportively with GI meds such as Cerenia as an anti-nausea (which patient is already being administered), and adding erythromycin as a prokinetic at 0.5-1.0 mg/kg by mouth every 8 hours.

SPECIES

Canine

Recommend ruling out hyperadrenocorticism, hypothyroidism, hypertriglyceridemia, and submitting a Texas A&M GI panel to screen the patient for occult gastrointestinal or occult pancreatic disease. It is unlikely that the patient's hepatopathy is primary.

BREED

JRT x

The patient may likely have bacterial cholangitis. Recommend an ultrasound guided aspirate of the gallbladder and submitting bile for aerobic and anaerobic bacterial culture as well as submitting bile for cytology. If owner elects not to pursue this diagnostic, then recommend treating the patient with an antibiotic such as Clavamox (as already discussed) for at least 30 days, and then recommend rechecking liver values and a gallbladder ultrasound after completion of this course of antibiotics to determine if this problem appears resolved. This may be the source of the patient's elevated ALP and the appearance of the patient's liver on this ultrasound. We do recommend the other testing already discussed to screen for other causes of the patient's hepatopathy, but the gallbladder is most likely playing a significant role in the patient's hepatopathy and is most likely contributing to the patient's current illness.

SEX

Neutered Male

AGE

11 Years 7 Months

Patient's lab work is not suggestive of a completely obstructive process for the gallbladder. However, if the gallbladder does not improve with antibiotic therapy, still recommend aspirating. If on recheck the patient's gallbladder is not appearing to be improving with therapy, then consideration for a cholecystectomy should occur at that time depending on how the patient is doing clinically. If they are clinically well, surgery may be warranted to remove the gallbladder.

WEIGHT

28.6 lbs

INTERPRETED BY

Greg Kuhlman, DVM,
DACVIM (SAIM)

Recommend starting Ursodiol at 15 mg/kg split into two daily doses for 4-6 weeks until recheck to determine if it is helping.

IMAGING PERFORMED BY

Jenni Tudini, MRCVS,
SDEP Certified (Abd)

HOSPITAL NAME

East Aurora Veterinary
Hospital

REFERRING VET

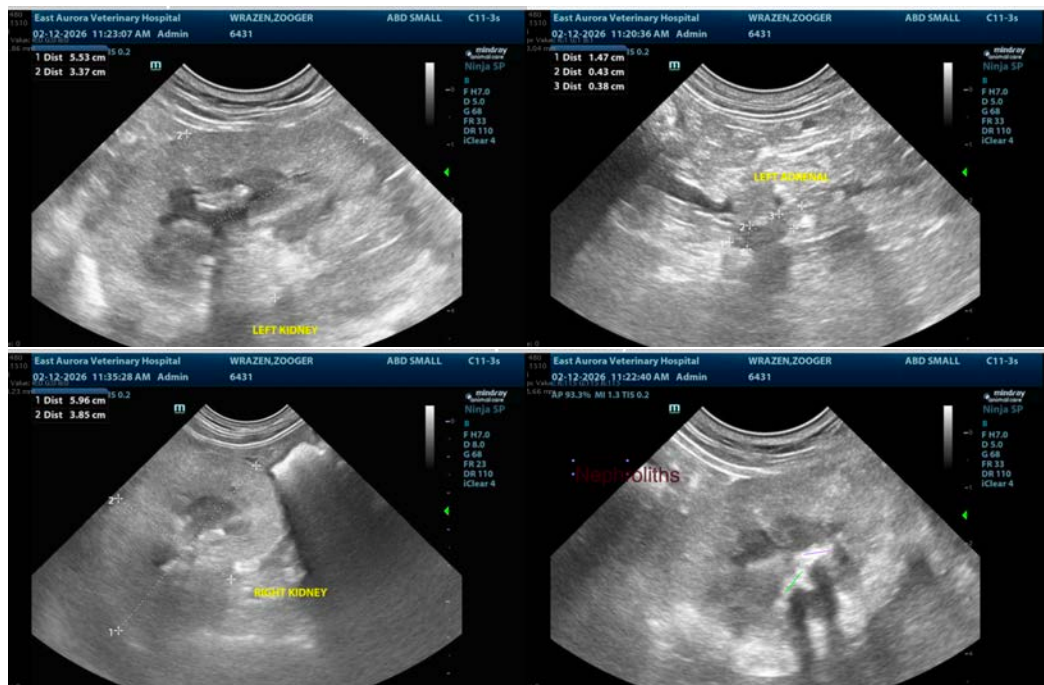
Dr. Sara Huckabone

INVOICE

72982

DATE

2/13/26





PATIENT

Zooger Wrazen

SPECIES

Canine

BREED

JRT x

SEX

Neutered Male

AGE

11 Years 7 Months

WEIGHT

28.6 lbs

INTERPRETED BY

Greg Kuhlman, DVM,
DACVIM (SAIM)

IMAGING PERFORMED BY

Jenni Tudini, MRCVS,
SDEP Certified (Abd)

HOSPITAL NAME

East Aurora Veterinary
Hospital

REFERRING VET

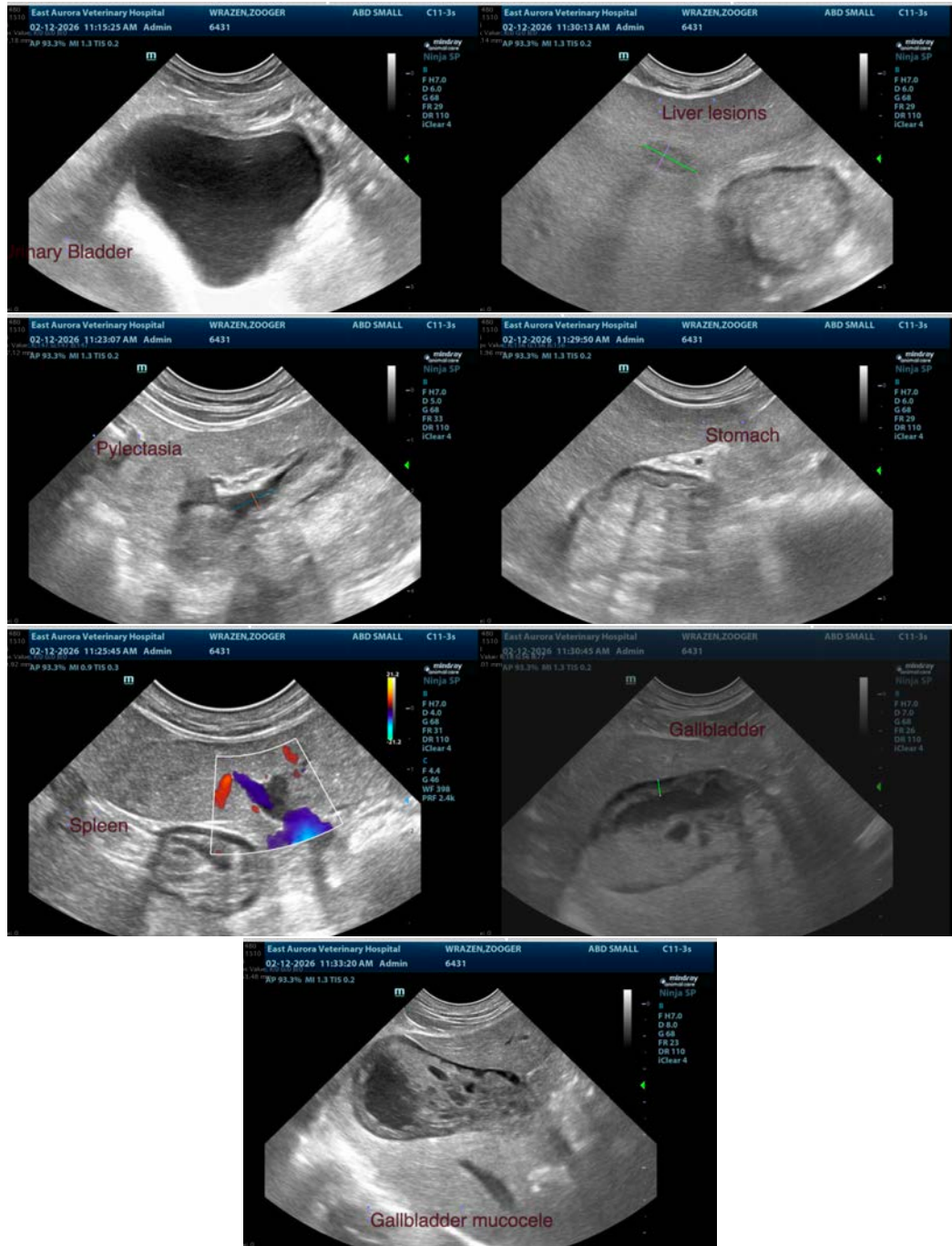
Dr. Sara Huckabone

INVOICE

72982

DATE

2/13/26





PATIENT

Zooger Wrazen

SPECIES

Canine

BREED

JRT x

SEX

Neutered Male

AGE

11 Years 7 Months

WEIGHT

28.6 lbs

INTERPRETED BY

Greg Kuhlman, DVM,
DACVIM (SAIM)

IMAGING PERFORMED BY

Jenni Tudini, MRCVS,
SDEP Certified (Abd)

HOSPITAL NAME

East Aurora Veterinary
Hospital

REFERRING VET

Dr. Sara Huckabone

INVOICE

72982

DATE

2/13/26

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.

Greg Kuhlman, DVM, DACVIM (SAIM)

Veterinary Internal Medicine Specialist
info@SonoPath.com