



PATIENT

Penny Burrows

SPECIES

Canine

BREED

Shih Tzu

SEX

Spayed Female

AGE

16 Years

WEIGHT

12 lbs

INTERPRETED BY

Greg Kuhlman, DVM,
DACVIM (SAIM)

IMAGING PERFORMED BY

Vincent Ravancho, CVT

HOSPITAL NAME

Verona Animal
Hospital

REFERRING VET

Dr. Brazer

INVOICE

74467

DATE

4/15/26

PRESENTING CLINICAL SIGNS

Progressive Hyporexia. Clinical findings - Acute Chordae rupture, on cardiac medications, however the hyporexia started about 1 month prior to CHF.

Current medications - Pimobendan 1.25mg BID, Lasix 10mg BID, Carprofen 12.5 mg BID
Sedated with Gabapentin

Abnormal PE/Chem/CBC/UA Results: Hx of CRD, diffuse hepatic findings. Nodule on AUS, + bilateral adrenomegaly +/-nodule on AUS

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

In the intraluminal cranial aspect of the urinary bladder there is a 3.1 mm x 2.3 mm isoechoic smooth lesion present within the bladder. The remainder of the urinary bladder appears normal with mild debris.

The right kidney is markedly small in size, measuring 2.3 cm, with complete loss of corticomedullary distinction and irregular shape.

The left kidney is overall normal in size (3.95 cm) and shape with smooth peripheral margination. A normal 1:3 cortex to medulla ratio is maintained. The medulla and cortex are uniform in texture with some mild increased cortical echogenicity and mild loss of corticomedullary distinction, expected in this age patient. There is no evidence of pyelectasia or infarcts observed. Minor non-obstructive nephroliths present in the left renal pelvis.

Adrenal Glands

The right adrenal gland presents normal shape and homogenous parenchyma. The phrenic vasculature is unremarkable. The cranial pole measures 6.0 mm and the caudal pole measures 4.9 mm.

The left adrenal gland is diffusely enlarged and has a heterochoic echotexture. Cranial pole measures 7.6 mm. Caudal pole measures 7.7 mm. There is a possible hyperechoic cystic mass present in what appears to be the caudal pole, measuring 1.16 cm x 1.13 cm.

Spleen

The spleen is normal in size, shape, margination and echogenicity. No masses are seen. Normal blood flow.

Liver

Liver is relatively normal in size and contour. Parenchyma is mildly heterogenous and coarse with mild likely age-related parenchymal remodeling noted. No focal lesions are observed. Visible vasculature and biliary tree appear normal without distension or congestion.

Gallbladder is moderately distended with anechoic bile as well as suspended and gravity dependent echogenic debris. The wall is smooth without visible thickening. There is no evidence of cystic or CBD dilation. There is no evidence of effusion or inflammation.



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Gastrointestinal

The stomach and intestines have normal wall layering and thickness. Colon contains normal contents with normal wall thickness.

Pancreas

The visible left limb of the pancreas is mildly hypoechoic without significant surrounding steatitis. The area of the right limb of the pancreas is seen, no pathology noted.

Free Abdomen

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

ULTRASONOGRAPHIC FINDINGS

- Bilateral evidence of possible chronic kidney disease. The right kidney is severely affected and is most likely non-functional at this time.
- Cranial urinary bladder lesion - Most likely a benign polyp, which could be due to chronic bacterial cystitis, less likely malignant neoplasia.
- Enlarged left adrenal gland with cystic mass – This is most likely an incidental finding.
- Suspect age related hepatic changes.
- Mild gallbladder debris – Appears clinically incidental.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Recommend full staging, monitoring and managing of the patient per IRIS guidelines.

Recommend urinalysis if not already performed. If active urine sediment, recommend urine culture. If bacterial cystitis is ruled out, consider submitting a BRAF test to screen the patient for possible transitional cell carcinoma. If TCC is ruled out, then recommend monitoring this polyp over time. If it is stable, no further action would be required. If the polyp is growing in size or number, then cystoscopy for biopsy would be recommended.

Recommend submitting cPLI to screen for possible clinically significant pancreatic inflammation that may explain the patient's clinical signs of hyporexia.

I suspect the hepatic changes in this patient are age related. However, given the patient's clinical signs, and if not already performed, recommend performing a serum chemistry to evaluate liver values. If a hepatopathy is present, consider possible fine needle aspirate of the liver to rule out round cell neoplasia such as lymphoma or mast cell disease. Consider submitting Leptospirosis testing if patient is not vaccinated. Ultimately, if hepatopathy is confirmed via lab work and specifically ALT is consistently and progressively elevated, then consider a liver biopsy.

Given the enlarged left adrenal gland, recommend screening the patient for hyperadrenocorticism via a urine cortisol to creatinine ratio. If normal, hyperadrenocorticism would be ruled. If UCCR is increased, recommend low-dose Dexamethasone suppression test. Recommend screening the patient with a blood pressure. If elevated, consider screening the patient for a pheochromocytoma based on the small mass associated with the left adrenal gland. If functional adrenal disease is ruled out, recommend rechecking



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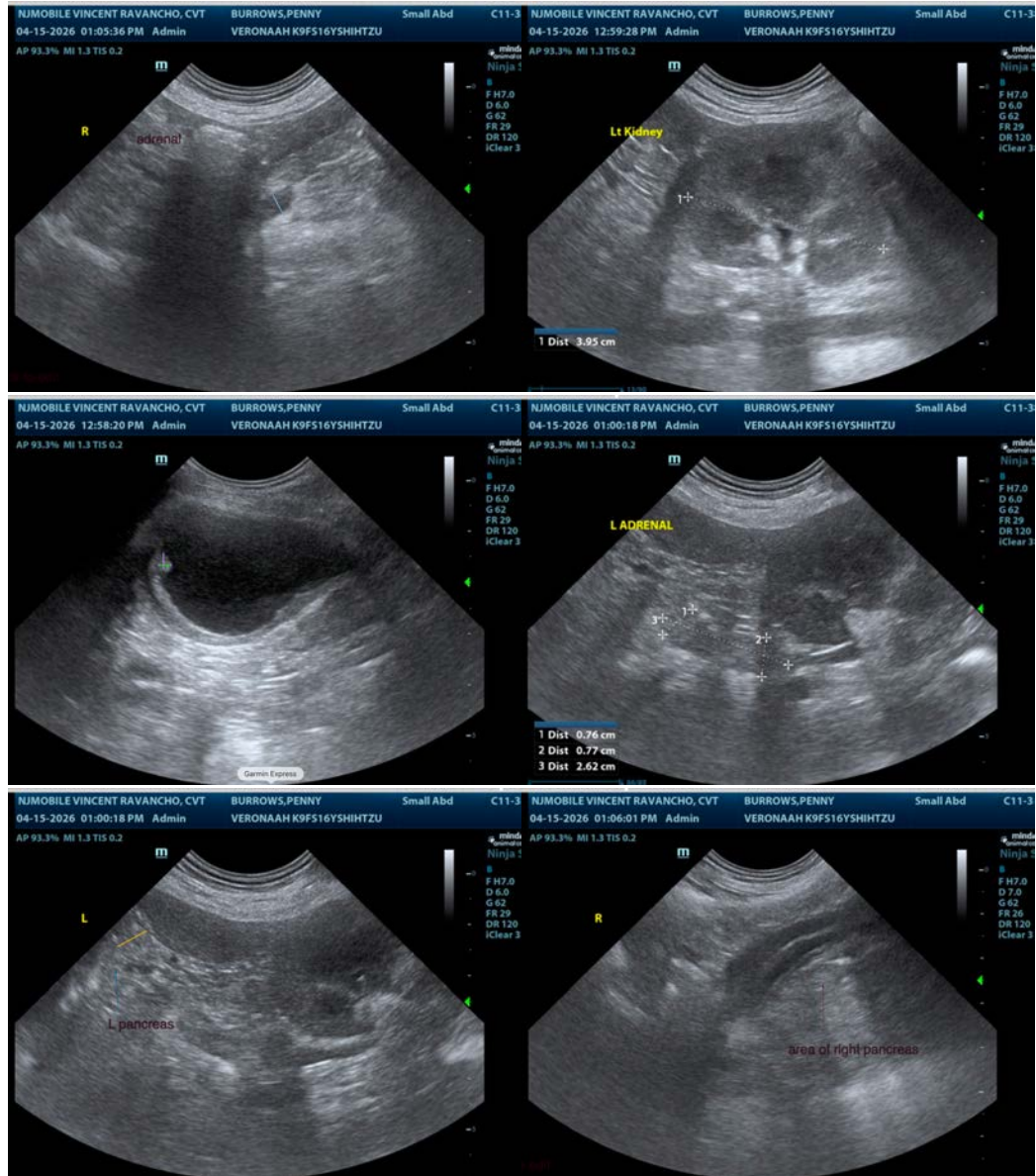
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left adrenal gland appearance via ultrasound every 3-6 months to determine if it changing significantly. If it is changing or increasing in size, consider left sided adrenalectomy.

No specific cause for patient's clinical signs seen on this exam.





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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.

Greg Kuhlman, DVM, DACVIM (SAIM)

Veterinary Internal Medicine Specialist
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