



**PATIENT**

Bella Peragine

**SPECIES**

Canine

**BREED**

Shih Tzu x

**SEX**

Spayed Female

**AGE**

12 Years 4 Months

**WEIGHT**

16.7 lbs

**INTERPRETED BY**

Greg Kuhlman, DVM,  
DACVIM (SAIM)

**IMAGING PERFORMED BY**

Vincent Ravancho, CVT

**HOSPITAL NAME**

Englewood Cliffs  
Veterinary Hospital

**REFERRING VET**

Dr. Park

**INVOICE**

74634

**DATE**

4/21/26

**PRESENTING CLINICAL SIGNS**

Elevated Liver enzymes; palpable C.O.M. Hx bladder stones  
Abnormal PE/Chem/CBC/UA Results: ALT 215, AlkP 1132, Chol 465, Lipase 302

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**Urinary System**

The bladder contains minimal urine. There is one large 10.1 mm x 11.3 mm hyperechoic shadowing urolith present. There are two smaller uroliths present, one measuring 2.8 mm and the second measuring 2.0 mm in width. The luminal margin of the bladder wall is irregular in shape.

Kidneys are overall normal in size and shape with smooth peripheral margination. A normal 1:3 cortex to medulla ratio is maintained. The medulla and cortices 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, mineral or infarcts observed. Left kidney measures 4.2 cm. Right kidney measures 4.9 cm.

**Adrenal Glands**

The right adrenal gland measures at the upper end of normal limits for a patient of this body weight, measuring 6.8 mm in width at both the cranial and caudal poles.

The left adrenal gland is diffusely enlarged, measuring 8.0 mm in width at the caudal pole and 8.0 mm in width at the cranial pole. The medulla of the left adrenal gland is hyperechoic. The cortex is hypoechoic. No obvious masses or lesions seen.

**Spleen**

The spleen is normal in size, shape, margination and echogenicity. There are multifocal hyperechoic, non-capsule displacing lesions present throughout the spleen, generally adjacent to large vessels.

**Liver**

Liver is subjectively enlarged (swollen contour) without disruption of architecture. It has a normal homogenous echotexture. Parenchyma is diffusely hyperechoic characterized by less prominent than normal portal vein walls and increased echogenicity relative to the spleen and falciform fat. 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.

**Gastrointestinal**

The stomach and 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.



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**Free Abdomen**

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

**ULTRASONOGRAPHIC FINDINGS**

- Uroliths and irregular urinary bladder wall – The irregular wall is most likely due to chronic inflammation from the uroliths.
- Multifocal hyperechoic splenic lesions – Most likely benign myelolipomas, not clinically concerning.
- Enlarged left adrenal gland and upper end of normal limits right adrenal gland.
- Hyperechoic hepatomegaly – Consistent with possible endocrine disease such as a hyperadrenocorticism. These changes are most likely due to a benign vacuolar hepatopathy.
- Gallbladder debris.
- Age related renal changes.

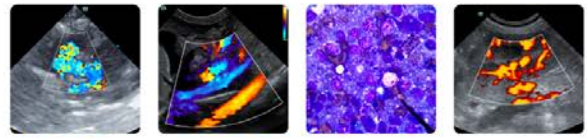
**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

Recommend screening the patient for hyperadrenocorticism via a low-dose Dexamethasone suppression test. This may be the cause of the patient's elevated liver values. If hyperadrenocorticism is ruled out, then consider screening for other secondary diseases that may be causing a secondary hepatopathy such as hypertriglyceridemia, hypothyroidism, occult pancreatic or occult gastrointestinal disease.

Given the concern for possible hyperadrenocorticism, the uroliths may be calcium oxalate stones. If not already attempted, switch patient to a urinary dissolution diet for one month and re-image the patient to determine if stones are dissolving or are resolved. If not, consider cystotomy and submitting stones for urinalysis.

Before any surgery is performed, recommend determining that the patient has hyperadrenocorticism, and achieving good regulation of this disease before recommending surgery so that no significant surgery complications occur.

Recommend submitting urine culture to rule out occult urinary tract infection as a component of the patient's lower urinary tract disease.



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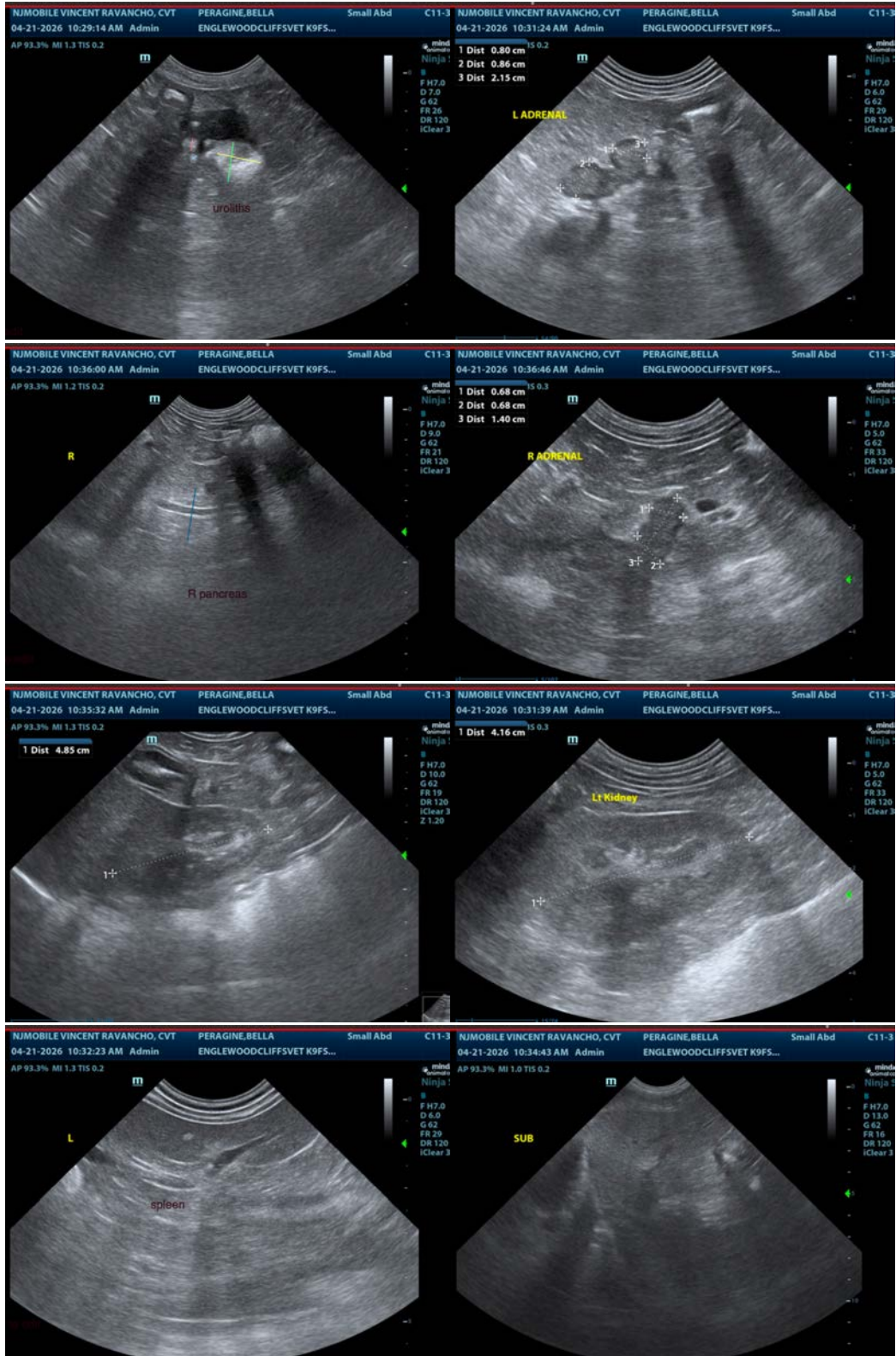
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

**Greg Kuhlman, DVM, DACVIM (SAIM)**

Veterinary Internal Medicine Specialist  
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