



**PATIENT**

Riley Tait

**SPECIES**

Canine

**BREED**

Shih Tzu

**SEX**

Neutered Male

**AGE**

11 years 9 mo

**WEIGHT**

9.45 lbs

**INTERPRETED BY**

Andrea Nicastro,  
DVM, Diplomate  
ACVIM (Small Animal  
Internal Medicine)

**IMAGING  
PERFORMED BY**

Dr. Brian Barnes

**HOSPITAL NAME**

Westview VH

**REFERRING VET**

Dr. Brian Barnes

**INVOICE**

10367

**DATE**

2./15/22

**PRESENTING CLINICAL SIGNS**

History: R/C Echo and AUS. Previous diagnosis DMVD, DTVD and AI. Last scan 9/4/21. Also history of vacuolar hepatopathy and proteinuria and mildly swollen adrenals  
Abnormal PE/Chem/CBC/UA Results: Grade 3/6 AV holosystolic murmur. PMI left thorax

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**Urinary System**

The bladder is moderately distended. The wall is normal in thickness and a smooth mucosal surface. A 0.67 aggregation of mineralized sand versus distinct calculus is observed within the lumen, as well as a small amount of suspended echogenic debris. The region of the trigone and the visualized portion of the proximal urethra are normal.

The prostate is normal in size (0.58 cm in width) and shape. Parenchyma is homogenous. The prostatic urethra appears normal without evidence of dilation or obstruction.

The left kidney is normal in size (5.15 cm in length); with a normal shape and smooth peripheral contours. The cortex is diffusely thickened and hyperechoic with numerous pinpoint mineralized foci. There is moderate loss of corticomedullary distinction. Hyperechoic shadowing diverticular foci, as well as several nonobstructive nephroliths are visualized. Several small cortical cysts are present. There is no evidence of pyelectasia, infarcts or hydroureter. Renal vasculature is normal.

The right kidney is normal in size (5.41 cm in length); with a normal shape and smooth peripheral contours. The cortex is diffusely thickened and hyperechoic with numerous pinpoint mineralized foci. There is moderate loss of corticomedullary distinction. Hyperechoic shadowing diverticular foci, as well as several nonobstructive nephroliths are visualized. Several small cortical cysts are present. There is no evidence of pyelectasia, infarcts or hydroureter. Renal vasculature is normal.

**Adrenal Glands**

The left adrenal gland is upper limits of normal size (0.42 cm at cranial pole) (0.61 cm at caudal pole) (1.90 cm in length); normal shape; homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

The right adrenal gland is normal size (0.38 cm at cranial pole) (0.44 cm at caudal pole) (1.55 cm in length); normal shape; homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

**Spleen**

The spleen is normal in size (1.26 cm in width at the level of the hilus) with a normal capsular contour. There is appropriate echogenicity and echotexture. Several pinpoint hyperechoic foci are observed throughout the organ. Splenic vasculature is normal.

**Liver**



**PATIENT**

Riley Tait

The liver is subjectively enlarged with swollen peripheral contours. The parenchyma is isoechoic relative to the spleen and exhibits subtle heterogeneity and a coarse architecture. No distinct focal lesions are observed. Hepatic vasculature and intrahepatic biliary tracts are of normal volume with no evidence of congestion.

**SPECIES**

Canine

The gall bladder lumen is moderately distended. The wall is thin and smooth. A moderate amount of aggregated echogenic partially dependent debris is observed within the lumen. The cystic and common bile ducts are normal.

**BREED**

Shih Tzu

**Gastrointestinal**

The stomach and intestine are free of stasis and exhibit normal peristaltic activity. The gastric lumen is not distended. The gastric wall and pylorus are normal in thickness with a normal layering pattern. The small intestinal lumen is not dilated. The small intestinal wall thickness is normal with a normal layering pattern and appropriate mural detail. Discreet masses are not identified. The colonic wall is normal. No obstructive or overt infiltrative disease is noted.

**SEX**

Neutered Male

**AGE**

11 years 9 mo

**Pancreas**

The left limb of the pancreas is visible with normal curvilinear peripheral contours. The parenchyma is largely isoechoic relative to surrounding omental fat and slightly mottled in appearance. The pancreatic duct is visible but not overtly dilated. There is no evidence of peripancreatic inflammation or effusion.

**WEIGHT**

9.45 lbs

**Free Abdomen**

The peritoneal cavity is normal. There is no evidence of inflammation or effusion. The abdominal lymph nodes are normal/not visible.

**INTERPRETED BY**

Andrea Nicastro,  
DVM, Diplomate  
ACVIM (Small Animal  
Internal Medicine)

**ULTRASONOGRAPHIC FINDINGS**

**Primary Findings**

- Cystic calculus (versus aggregation of mineralized sand).
- Benign hepatopathy.
- Gall bladder debris, non-mucocele

**IMAGING**

**PERFORMED BY**

Dr. Brian Barnes

**Secondary Findings**

- Bilateral nephropathy with mineralization/nonobstructive nephrolithiasis
- Mild left adrenomegaly
- Splenic dystrophic mineralization. This can sometimes be seen with endocrinopathies.
- The pancreatic changes are most consistent with age-related parenchymal remodeling, potentially secondary to a prior inflammatory episode, early fibrosis or chronic pancreatitis.

**HOSPITAL NAME**

Westview VH

**REFERRING VET**

Dr. Brian Barnes

**INVOICE**

10367

\*\*Overall, the sonographic changes are similar to the previous scan, except for the development of the urinary bladder stones/sand.

**DATE**

2./15/22



## PATIENT

Riley Tait

## SPECIES

Canine

## BREED

Shih Tzu

## SEX

Neutered Male

## AGE

11 years 9 mo

## WEIGHT

9.45 lbs

## INTERPRETED BY

Andrea Nicastro,  
DVM, Diplomate  
ACVIM (Small Animal  
Internal Medicine)

## IMAGING PERFORMED BY

Dr. Brian Barnes

## HOSPITAL NAME

Westview VH

## REFERRING VET

Dr. Brian Barnes

## INVOICE

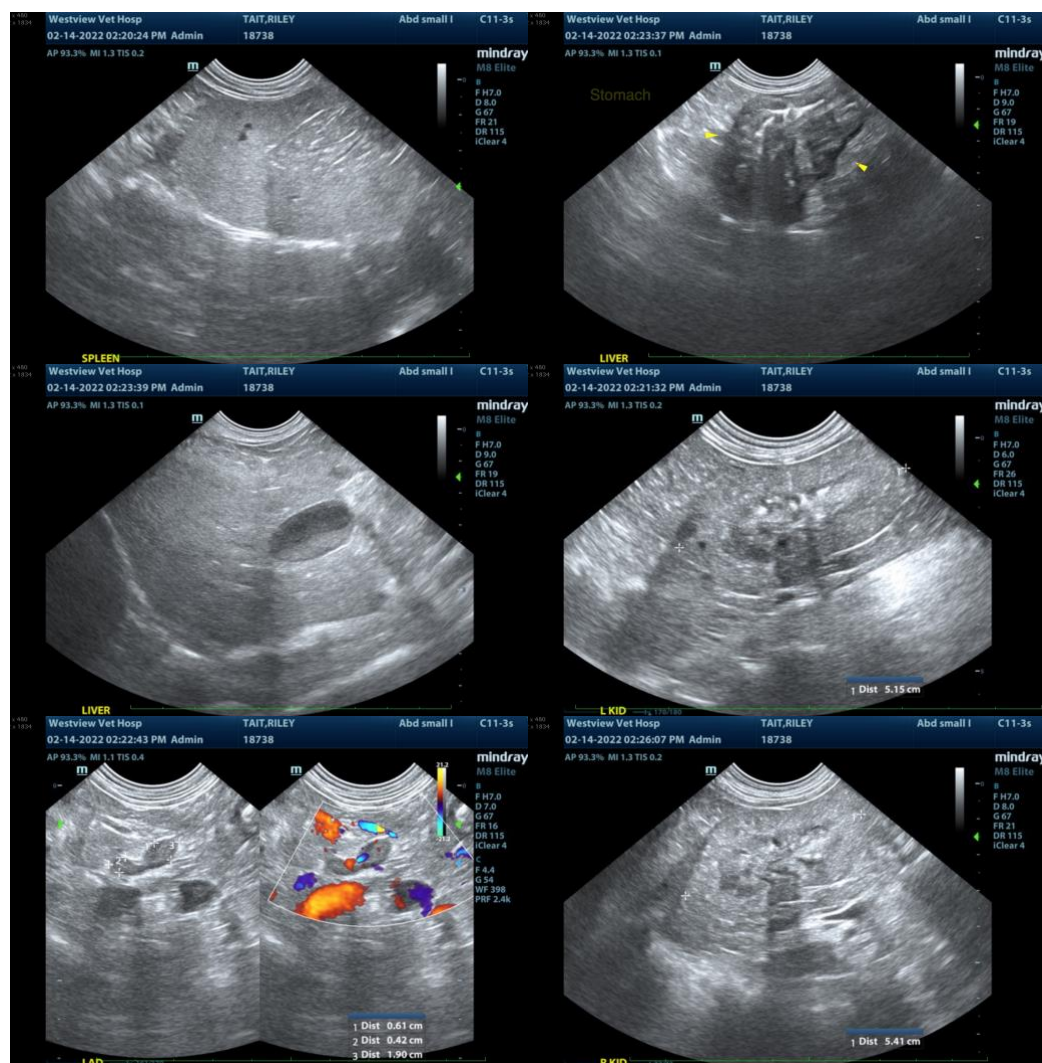
10367

## DATE

2./15/22

## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- Consider abdominal radiographs to further assess for a distinct cystic calculus. If present, consider a cystostomy with stone removal analysis and culture, or an attempt at medical dissolution
- Consider testing for hyperadrenocorticism with a low-dose dexamethasone suppression test or ACTH stimulation test if clinical signs (i.e., PU/PD) develop in the future.
- If proteinuria is still present, a UPC and baseline blood pressure measurement should be considered





**PATIENT**

Riley Tait

**SPECIES**

Canine

**BREED**

Shih Tzu

**SEX**

Neutered Male

**AGE**

11 years 9 mo

**WEIGHT**

9.45 lbs

**INTERPRETED BY**

Andrea Nicastro,  
DVM, Diplomate  
ACVIM (Small Animal  
Internal Medicine)

**IMAGING PERFORMED BY**

Dr. Brian Barnes

**HOSPITAL NAME**

Westview VH

**REFERRING VET**

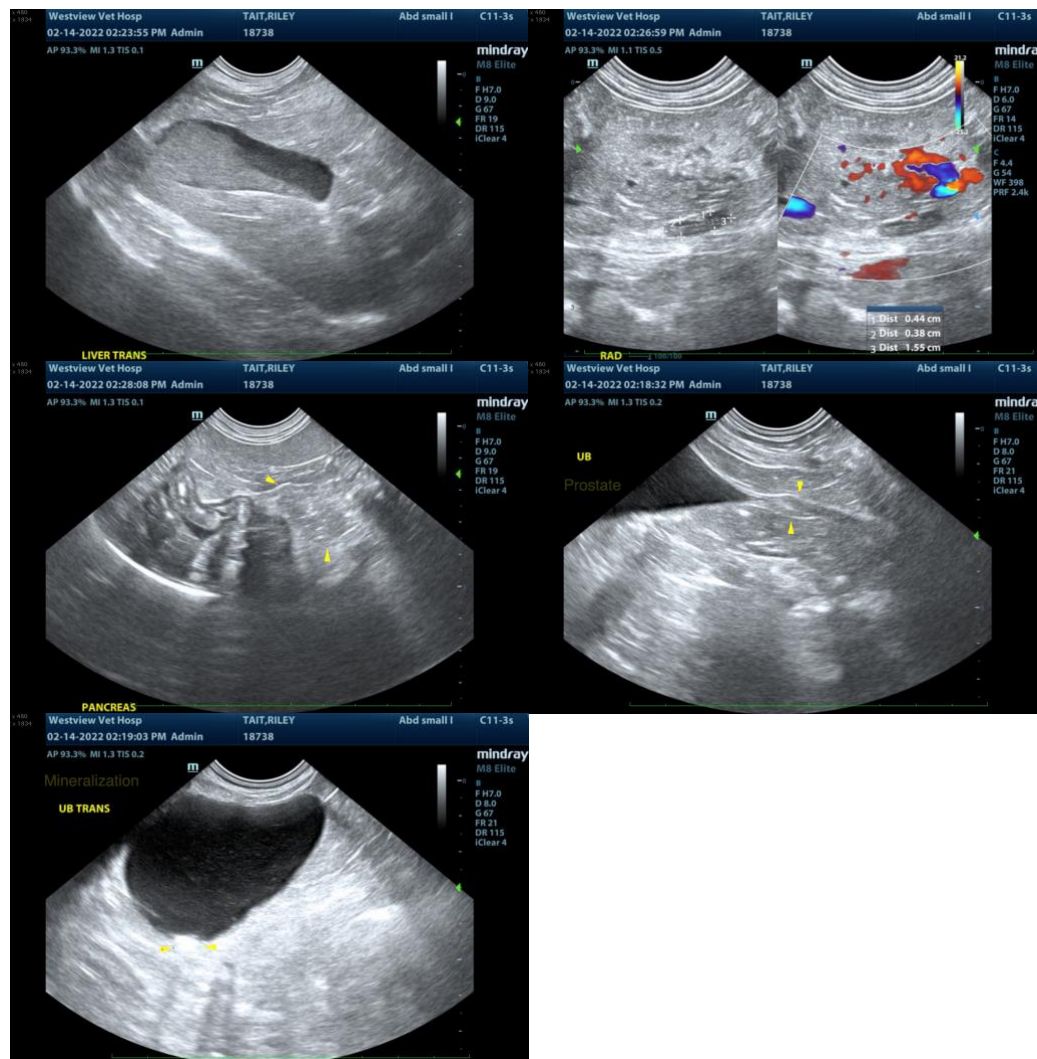
Dr. Brian Barnes

**INVOICE**

10367

**DATE**

2./15/22



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.

Andrea Nicastro, DVM, Diplomate DACVIM (Small Animal Internal Medicine)  
info@SonoPath.com