



**PATIENT**

**PRESENTING CLINICAL SIGNS**

Teddy Brewer

History: Patient has had intermittent seizures for years that recently became more frequent. Not on medication. Otherwise normal. Has been taking Denamarin since July.

**SPECIES**

Abnormal PE/Chem/CBC/UA Results: Mildly elevated ALT in July this year, 214 (10-125); in Sept ALT decreased to 156. Rest of bloodwork is WNL, including a Bile Acids Response test. U/A Sp. Gr. >1.050, pH 6.5 Bili 3, Bld 50, WBC>50, RBC 19

Canine

**BREED**

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

Terrier Mix

**Urinary System**

**SEX**

Urinary bladder is adequately distended. It has a normal uniform wall thickness. Contents include primarily anechoic fluid with occasional echogenic non-shadowing debris, most consistent with exfoliated cells, mucous and/or small blood clots. Both sterile inflammation as well as urinary tract infection can also present with echogenic debris. No masses or cystoliths are observed. The trigone and visible pelvic urethra are normal in thickness with a smooth mucosal surface.

Neutered male

**AGE**

The area of the prostate is examined without evident pathology.

5 years

Left kidney is normal is size (3.64 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed.

**WEIGHT**

Right kidney is normal is size (3.84 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed.

14.6 lbs

**INTERPRETED BY**

**Adrenal Glands**

Beth Johnson, DVM  
DACVIM

Left adrenal gland is normal in size (0.41 cm at cranial pole and 0.35 cm at caudal pole), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

**IMAGING PERFORMED BY**

Right adrenal gland is normal in size (0.34 cm at cranial pole and 0.41 cm at caudal pole), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

Dr. Bartus

**HOSPITAL NAME**

**Spleen**

Valley VS

Spleen is subjectively normal in size with a normal smooth capsular contour. Parenchyma is appropriately finely textured and homogenous with normal echogenicity relative to surrounding tissue (hyperechoic to liver). No focal nodules or masses are observed. Splenic vasculature appears normal.

**REFERRING VET**

Dr. Baruts

**Liver**

**INVOICE**

Liver is subjectively normal in size with normal smooth curvilinear peripheral contour. Parenchyma is appropriately hypoechoic to the spleen in echogenicity and appropriately mildly coarse and homogenous in echotexture. No focal lesions are observed. Visible vasculature and biliary tree appear normal without distension or congestion.

39958

**DATE**

10/6/22



<b>PATIENT</b>	Gallbladder is non-distended in size. The wall is smooth without visible thickening. Luminal contents are primarily anechoic. There is no evidence of cystic or common bile duct dilation.
Teddy Brewer	
<b>SPECIES</b>	<b><i>Gastrointestinal</i></b>
Canine	The visible stomach wall is normal in thickness and layering. The lumen of the stomach is empty with no evidence of obstruction, foreign material or infiltrative disease. Pyloric outflow tract appears patent.
<b>BREED</b>	The visible small intestines are normal in wall thickness and layering. Small intestinal motility appears adequate (1-3 contractions per min). The lumen of the small intestine is empty with no evidence of obstruction, foreign material or infiltrative disease.
Terrier Mix	
<b>SEX</b>	The visible colon is normal in wall thickness (< 0.2 cm) and layering. Contents are consistent with normal formed feces and gas.
Neutered male	
<b>AGE</b>	<b><i>Pancreas</i></b>
5 years	The observed pancreas appears appropriately isoechoic to surrounding omental fat. Visible capsule is smooth and normal in contour. Visible pancreatic parenchyma is homogenous and unremarkable. There is no visible pancreatic duct dilation. There is no evidence of active peripancreatic inflammation.
<b>WEIGHT</b>	<b><i>Free Abdomen</i></b>
14.6 lbs	There is no evidence of free peritoneal effusion noted in these images.
<b>INTERPRETED BY</b>	There is no apparent lymphadenopathy noted in these images.
Beth Johnson, DVM DACVIM	
<b>IMAGING PERFORMED BY</b>	<b>ULTRASONOGRAPHIC FINDINGS</b>
Dr. Bartus	<b>Primary Findings</b>
<b>HOSPITAL NAME</b>	<b>Urinary bladder debris.</b>
Valley VS	<b>Otherwise, unremarkable/normal abdomen.</b>
<b>REFERRING VET</b>	<b><u>INTERPRETATION OF THE FINDINGS &amp; FURTHER RECOMMENDATIONS</u></b>
Dr. Baruts	Urinalysis and, if indicated based on urinalysis results, urine culture are recommended. If protein is present in an otherwise quiet sediment, protein quantification with a urine protein to creatinine ration is recommended.
<b>INVOICE</b>	Blood pressure is recommended if not recently evaluated.
39958	It is possible given the patient's reported seizure activity and increase in seizure activity that the mildly increased ALT is secondary to the seizure activity versus the converse. If getting seizures under control does not result in improved ALT then recommendations of the ALT include antigen search including testing for Leptospirosis followed by potentially by empirical antibiotics and hepatic nutraceuticals with monitoring for improvement. If the liver enzymes do not improve and/or progress then ultimately liver sampling in the form of a FNA or biopsy may be warranted. In the meantime, given the reported increase in seizure activity consultation with a neurologist and potentially advanced imaging such as an MRI is
<b>DATE</b>	
10/6/22	



**PATIENT**

recommended. Beginning medical management for the seizures with Keppra is recommended while awaiting consultation with a neurologist.

Teddy Brewer

**SPECIES**

Canine

**BREED**

Terrier Mix

**SEX**

Neutered male

**AGE**

5 years

**WEIGHT**

14.6 lbs

**INTERPRETED BY**

Beth Johnson, DVM  
DACVIM

**IMAGING PERFORMED BY**

Dr. Bartus

**HOSPITAL NAME**

Valley VS

**REFERRING VET**

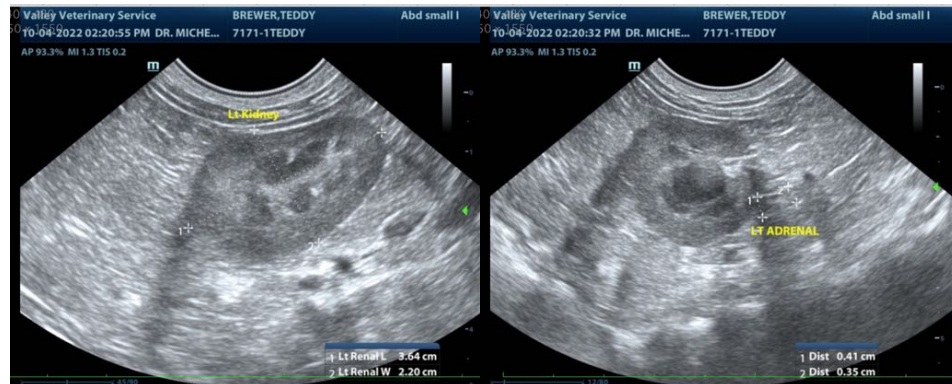
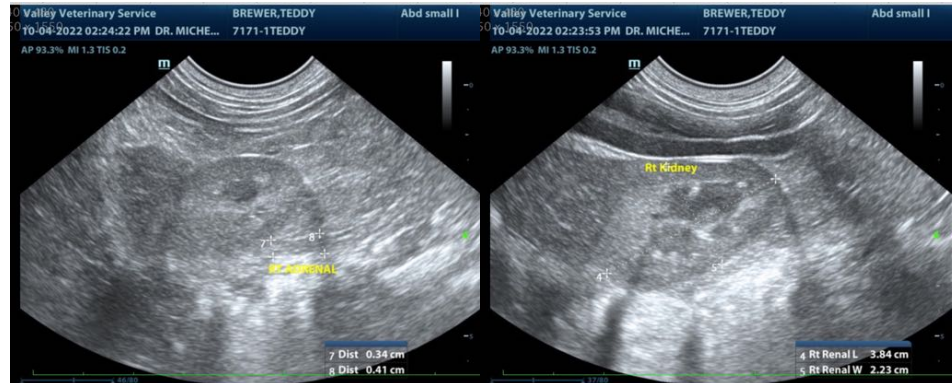
Dr. Baruts

**INVOICE**

39958

**DATE**

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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.

**Beth Johnson, DVM DACVIM**

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