

## PATIENT

Hannah Trent

## SPECIES

Canine

## BREED

Chihuahua x

## SEX

Spayed Female

## AGE

2019

## WEIGHT

5.62 kg

## INTERPRETED BY

Greg Kuhlman, DVM,  
DACVIM (SAIM)

## IMAGING PERFORMED BY

Loetitia Saint-Jacques,  
LVT

## HOSPITAL NAME

Roundhill Animal  
Hospital

## REFERRING VET

Dr. Carl Kelly

## INVOICE

75456

## DATE

5/25/26

## PRESENTING CLINICAL SIGNS

Presented today for "seizure" episode lasting 60-90 seconds involving mild torticollis of spine, involuntary raising of a front leg, variable head-tilt. No abnormal nystagmus or CNS signs. Normal menace & dazzle in both eyes throughout seizure. Conscious awareness was diminished but still evident. Dog would have fallen over if not supported. Post-ictal phase lasted about 4-5 minutes with steady return to normal. No VNS or peripheral nerve signs after mild postictal disorientation and proprioception deficit. Alpha Trak was 72 upon arrival. Owner free feeds, had access to food but owner not sure if she had eaten yet today. Catalyst 15/lytes 4, CBC & T4 attached. VS2 bile acids test was 115 (HIGH).

## ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

### *Urinary System*

Urinary bladder is adequately distended. It has a normal uniform wall thickness. Contents include primarily anechoic fluid with a moderate amount of 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 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. The distal urethra measures 3.2 mm in width.

The right kidney presents normal size (5.2 cm) with normal shape and architecture. Normal corticomedullary distinction. Non-obstructive linear multifocal hyperechoic diverticular foci with acoustic shadowing are noted. In the renal pelvis there is a 1.4 cm in width hyperechoic shadowing nephrolith present.

The left kidney presents normal size (4.9 cm) with normal shape and architecture. Normal corticomedullary distinction. Non-obstructive linear multifocal hyperechoic diverticular foci with acoustic shadowing are noted.

### *Adrenal Glands*

The right adrenal gland presents normal shape and homogenous parenchyma. The phrenic vasculature is unremarkable. The caudal pole measures 4.8 mm.

The left adrenal gland presents normal shape and homogenous parenchyma. The phrenic vasculature is unremarkable. The left adrenal gland measures 0.46 cm and 0.40 cm in width.

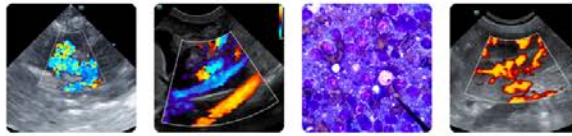
### *Spleen*

The spleen is normal in size (1.8 cm), shape, margination and echogenicity. No masses are seen.

### *Liver*

Liver is normal to subjectively small in size with slightly undulating or scalloped capsular contour or margins. Patchy ill-defined areas of increased echogenicity are present with reduced visualization of vessels. No overt nodules or masses are observed. Visible vasculature and biliary tree appear normal without distension or congestion.

There is a moderate amount of aggregating hypoechoic debris within the gallbladder lumen. The gallbladder wall is diffusely normal in thickness. Mild hyperechoic fat is surrounding the gallbladder.



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## ***Gastrointestinal***

The stomach and intestines have normal wall layering and thickness. Duodenum wall measures 3.9 mm in width. There is hyperechoic shadowing material moving throughout the lumen of the duodenum. No obstructive lesion is seen. Colon contains normal contents with normal wall thickness.

## ***Pancreas***

The pancreas is diffusely enlarged at 2.0 cm in width. It is diffusely hypoechoic with a nodular echotexture. Mild hyperechoic fat is surrounding the pancreas.

## ***Free Abdomen***

A left medial iliac lymph node measures 3.9 mm in width. Possibly reactive, although given its appearance neoplasia cannot be ruled out. Similar right iliac lymph node noted measuring 2.8 mm in width. This node appears most likely to be reactive, less likely to be neoplastic.

There are numerous mildly enlarged mesenteric lymph nodes present. Two representative nodes measure 3.3 mm in width each. These nodes appear reactive, much less likely enlarged due to neoplasia.

Ventral to the left kidney there are multiple small vessels present identified by doppler exam. These vessels are most likely acquired portosystemic shunts, possibly due to the patient's suspected hepatic fibrosis. The portal vein to caudal vena cava ratio is 1.0, which effectively rules out a congenital portosystemic shunt.

A scant pocket of free fluid is noted cranial to the urinary bladder.

No pericardial effusion or obvious right auricular mass seen in the cardiac image provided.

## **ULTRASONOGRAPHIC FINDINGS**

- Urinary bladder debris.
- Renal mineralization.
- Hepatic lipidosis pattern.
- Gallbladder debris.
- Hyperechoic shadowing material throughout duodenal lumen.
- Enlarged, hypoechoic, nodular pancreas.
- Enlarged medial iliac and mesenteric lymph nodes.
- Suspect acquired portosystemic shunts ventral to left kidney.
- Scant free fluid cranial to urinary bladder.

## **INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

The changes to the gallbladder may be due to a process such as bacterial cholangitis. If possible, consider ultrasound guided aspirate of the gallbladder with submission of bile for aerobic and anaerobic culture and for cytology. If owners elect not to pursue this procedure, consider treating with Ursodiol at 15 mg/kg by mouth split into two daily doses and an antibiotic such as Amoxicillin for 4-6 weeks and rechecking the appearance of the gallbladder via ultrasound at that time.



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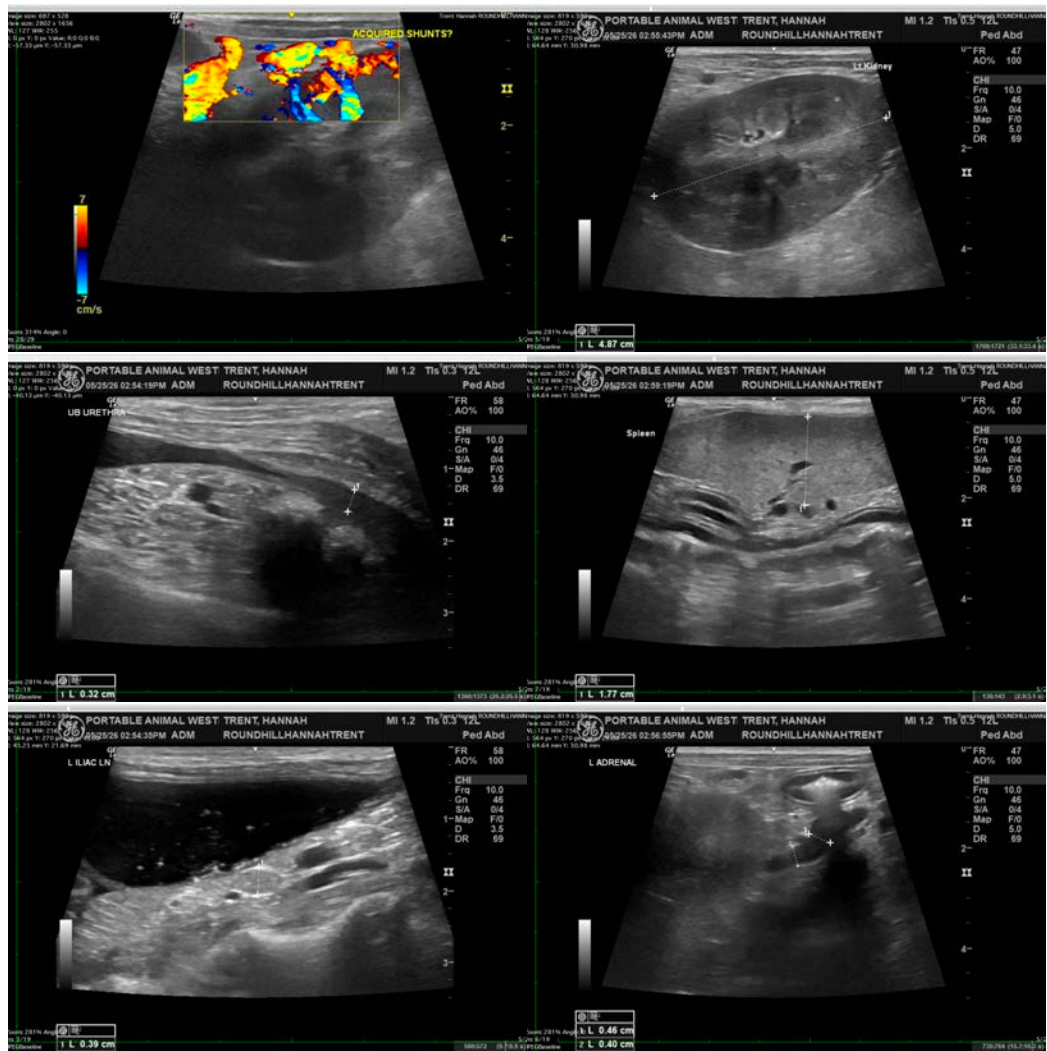
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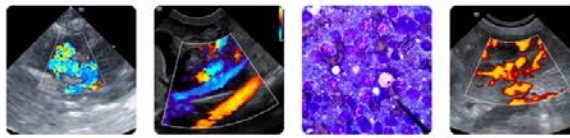
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The patient appears to have acute pancreatitis at this time. The nodular time is consistent with possible intermittent chronic pancreatitis. Recommend cPLI to determine the degree of pancreatitis present at this time.

The cause for the patient's suspected hepatic fibrosis is not determined on this exam. Differentials would include chronic primary hepatopathy from diseases such as copper storage disease or chronic active hepatitis. If the patient is not vaccinated for Leptospirosis, recommend testing for Leptospirosis as a cause. Other infectious disease that may cause the liver to have this appearance would be bartonellosis. Consider submitting bartonella testing to North Carolina State University. Other diseases that may cause the appearance of the liver would be infiltrative neoplasia such as lymphoma or mast cell disease, histiocytic sarcoma. Recommend fine needle aspirate of the liver with submission for cytology. Less likely but possibly metastatic neoplasia could cause the appearance of the liver.





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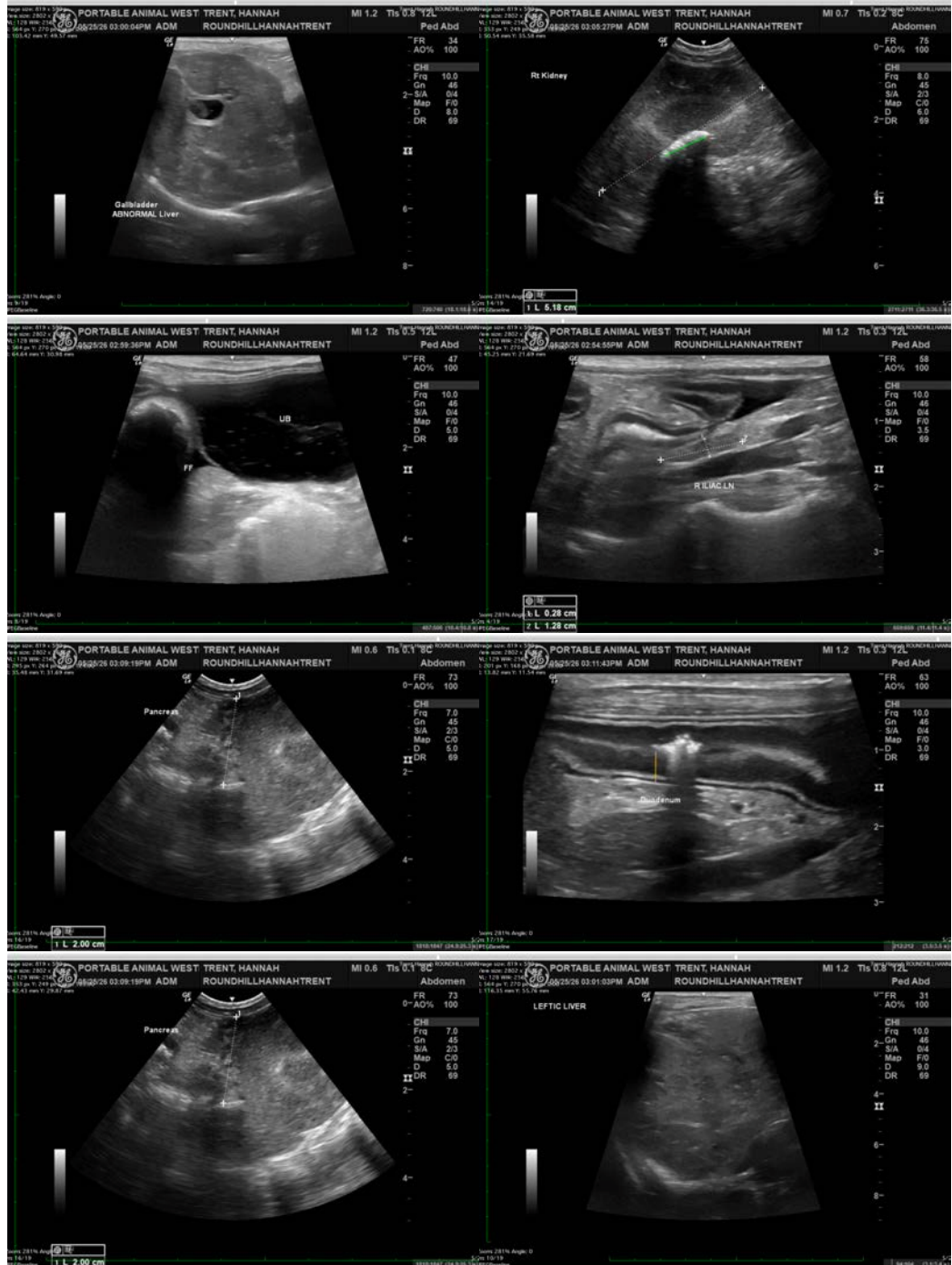
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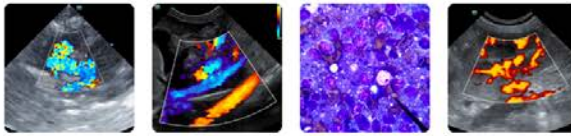
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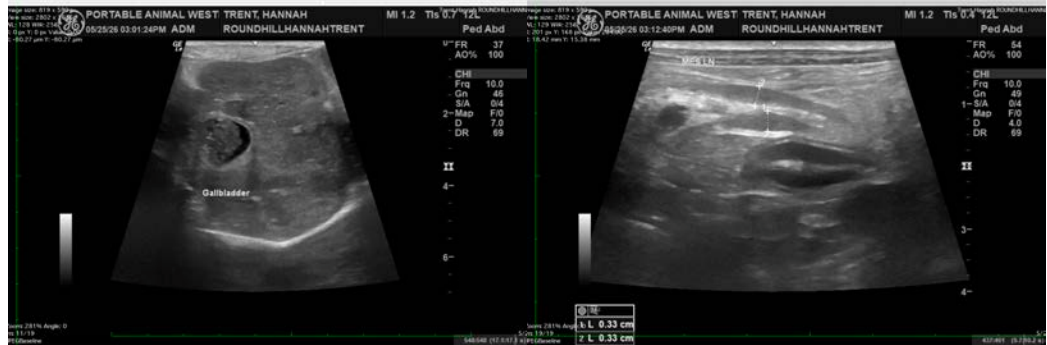
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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

[info@SonoPath.com](mailto:info@SonoPath.com)