



## PATIENT

Hayley Leatherwood

## SPECIES

Canine

## BREED

Chihuahua

## SEX

Spayed Female

## AGE

10

## WEIGHT

16.5 Pounds

## INTERPRETED BY

Alicia Angosto  
Guerrero, DMV,  
PgDip, MSc.

## IMAGING PERFORMED BY

Dr. Wes Spangler

## HOSPITAL NAME

TotalBond VH- Paw  
Creek

## REFERRING VET

Dr. Wes Spangler

## INVOICE

37352

## DATE

6/4/26

## PRESENTING CLINICAL SIGNS

History: 10yo FS Chihuahua presented on 5/30 for hematuria. Brief US scan of the urinary bladder revealed thickened UB wall, started Tx with clavamox and carprofen. Also noted a previous ALP value >2000, so look at the GB while in ultrasound. Noted advanced sludge that appeared to be non-gravity dependent. started patient on ursodiol at that visit as well and recommended a complete ultrasound scan sent to Sonopath. Pet's hematuria has improved. O does not report PU/PD, vomiting, or diarrhea in pet at this time or in the past.

Abnormal PE/Chem/CBC/UA Results: H ALT 175 (18 - 121) U/L AST 28 (16 - 55) U/L H ALP b 2642 (5 - 160) U/L H Cholesterol 450 (131 - 345) mg/dL Amylase 547 (337 - 1469) U/L H Lipase 313 (0 - 250) U/L H Creatine Kinase 254 (10 - 200) U/L.

## ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

### *Urinary System*

The urinary bladder lumen is normally distended, and the urinary bladder wall appears thin and smooth. The urine is anechoic. Normal appearance of the trigone and proximal urethra is observed. There are no calculi, and no evidence of inflammatory or neoplastic changes.

The left kidney is normal in shape and size, measuring 5.12×2.83 cm, with a cortical thickness of 0.40 cm in the sagittal plane. A cortical cyst measuring 1.53×2.85 mm is present.

The right kidney is normal in shape and size, measuring 5.11×2.64 cm, with a cortical thickness of 0.56 cm in the sagittal plane. A cortical cyst measuring 3.65×5.06 mm is present.

Both kidneys demonstrate normal cortical echogenicity. The corticomedullary ratio is normal and corticomedullary distinction is preserved. There is no evidence of pyelectasia, nephrolithiasis, or hydronephrosis.

### *Adrenal Glands*

Dorsoventral diameters measured in the sagittal plane: The left adrenal gland measures 0.51 cm at the cranial pole and 0.81 cm at the caudal pole. The right adrenal gland measures 0.71 cm at the cranial pole and 0.73 cm at the caudal pole.

### *Spleen*

Splenic thickness measures 1.17 cm. The parenchyma demonstrates normal echogenicity and a fine homogeneous echotexture. A small hyperechoic nodule measuring 2.50×2.77 mm is present and is most consistent with a benign myelolipoma-like lesion. The splenic capsule is smooth and regular.

### *Liver*

The liver is subjectively enlarged, with rounded margins and a regular contour. The hepatic parenchyma is predominantly homogeneous; however, mild regional variation in echogenicity is present, with some lobes appearing mildly hyperechoic and demonstrating a finer echotexture than adjacent hepatic parenchyma. No focal hepatic masses are identified. No hepatic lymphadenopathy is observed.

The gallbladder is moderately distended. Mild gallbladder mucosal hyperplasia is present. A moderate amount of biliary sludge is identified, containing multifocal linear hyperechoic striations. No evidence



## PATIENT

Hayley Leatherwood

## SPECIES

Canine

## BREED

Chihuahua

## SEX

Spayed Female

## AGE

10

## WEIGHT

16.5 Pounds

## INTERPRETED BY

Alicia Angosto  
Guerrero, DMV,  
PgDip, MSc.

## IMAGING PERFORMED BY

Dr. Wes Spangler

## HOSPITAL NAME

TotalBond VH- Paw  
Creek

## REFERRING VET

Dr. Wes Spangler

## INVOICE

37352

## DATE

6/4/26

of gallbladder wall thickening, cholecystitis, or rupture is identified. No dilation of the cystic duct or common bile duct is observed.

### *Gastrointestinal tract*

The stomach is empty and folded, containing a small amount of intraluminal gas. Gastric wall thickness measures 1.68 mm with preserved wall layering.

The pyloric wall measures 4.18 mm.

The duodenal wall measures 4.58 mm.

The jejunal wall measures 3.57 mm.

The ileal wall measures 1.78 mm.

Wall layering is preserved throughout the examined gastrointestinal tract. No evidence of obstruction, ileus, inflammatory mural changes, or foreign material is identified.

The colonic wall measures 1.06–1.26 mm. Formed fecal material is present within the descending colon.

### *Pancreas*

The pancreas measures approximately 1.08 cm in thickness. The pancreatic parenchyma is isoechoic relative to the adjacent mesenteric fat. No peripancreatic fat inflammation, pancreatic enlargement, mass lesion, or other sonographic evidence of active pancreatitis is identified.

### *Free Abdomen*

No sonographic evidence of abdominal effusion, peritonitis, or lymphadenomegaly is identified. The iliac trifurcation is normal.

## PRIMARY FINDINGS

- Hepatomegaly with mild heterogeneous increase in hepatic echogenicity and finer parenchymal echotexture in portions of the liver.
- Mild gallbladder mucosal hyperplasia. Moderate biliary sludge containing hyperechoic striations, compatible with early mucocele formation.
- Mild bilateral adrenomegaly.

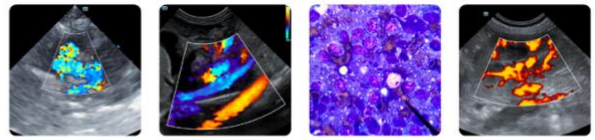
## SECONDARY FINDINGS

- Small bilateral renal cortical cysts.
- Small splenic myelolipoma-like nodule.

## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Hepatomegaly with mild regional increases in hepatic echogenicity and finer parenchymal echotexture, together with marked ALP elevation and hypercholesterolemia, is most consistent with vacuolar hepatopathy. Although histopathology would be required for definitive characterization, the overall ultrasonographic and clinicopathologic findings strongly support a chronic vacuolar hepatocellular process.

Mild gallbladder mucosal hyperplasia and moderate organized biliary sludge containing hyperechoic



## PATIENT

Hayley Leatherwood

## SPECIES

Canine

## BREED

Chihuahua

## SEX

Spayed Female

## AGE

10

## WEIGHT

16.5 Pounds

## INTERPRETED BY

Alicia Angosto  
Guerrero, DMV,  
PgDip, MSc.

## IMAGING PERFORMED BY

Dr. Wes Spangler

## HOSPITAL NAME

TotalBond VH- Paw  
Creek

## REFERRING VET

Dr. Wes Spangler

## INVOICE

37352

## DATE

6/4/26

striations are present. These findings are concerning for early gallbladder mucocele formation. No evidence of biliary obstruction, extrahepatic bile duct dilation, gallbladder rupture, or secondary cholecystitis is identified at this time.

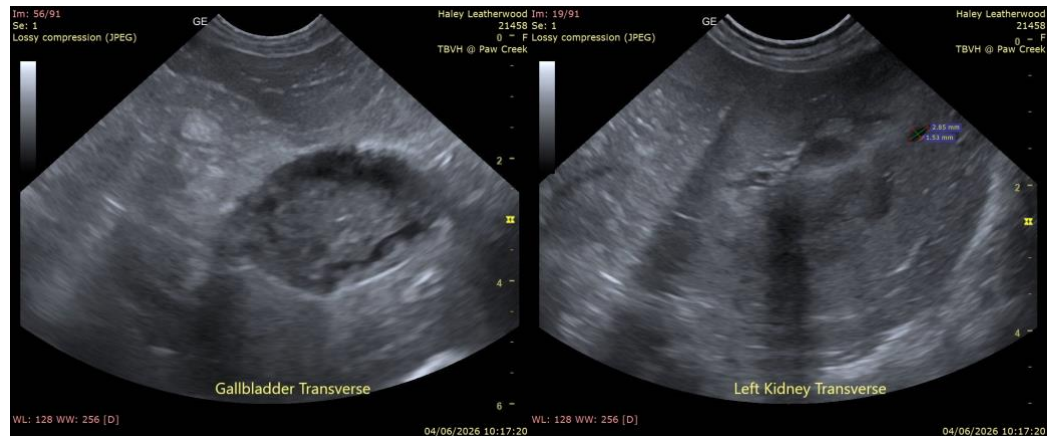
Mild bilateral adenomegaly is present. Given the concurrent vacuolar hepatopathy, marked ALP elevation, hypercholesterolemia, and developing gallbladder mucocele changes, an underlying endocrinopathy, particularly hyperadrenocorticism, should be considered.

Small bilateral renal cortical cysts and a tiny splenic myelolipoma-like lesion are considered incidental age-related findings.

### Recommendations:

- Consider endocrine screening for hyperadrenocorticism.
- Continue medical management of the gallbladder changes as directed by the attending veterinarian.
- Periodic ultrasonographic monitoring of the gallbladder is recommended to assess for progression of mucocele formation.
- Serial monitoring of liver enzyme activities and cholesterol concentrations is recommended.
- If hyperadrenocorticism is confirmed or strongly suspected, blood pressure assessment is recommended given the potential association with systemic hypertension.

Final diagnostic and therapeutic decisions should be made by the attending veterinarian, who can best integrate these findings with the patient's clinical status.





**PATIENT**

Hayley Leatherwood

**SPECIES**

Canine

**BREED**

Chihuahua

**SEX**

Spayed Female

**AGE**

10

**WEIGHT**

16.5 Pounds

**INTERPRETED BY**

Alicia Angosto  
Guerrero, DMV,  
PgDip, MSc.

**IMAGING PERFORMED BY**

Dr. Wes Spangler

**HOSPITAL NAME**

TotalBond VH- Paw  
Creek

**REFERRING VET**

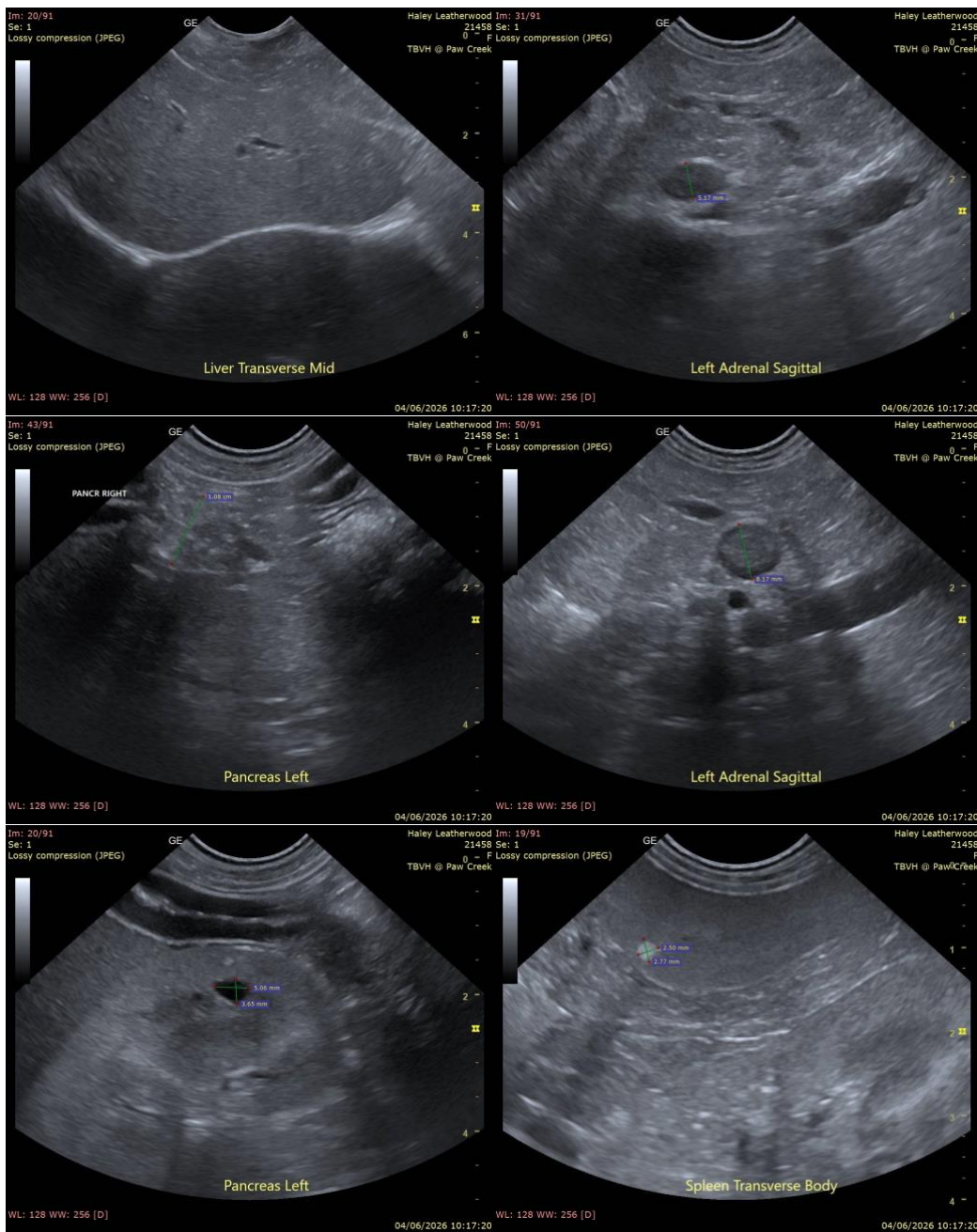
Dr. Wes Spangler

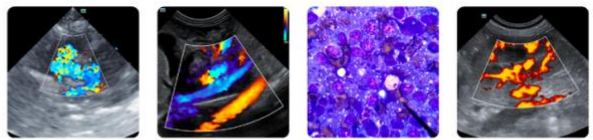
**INVOICE**

37352

**DATE**

6/4/26





## PATIENT

Hayley Leatherwood

## SPECIES

Canine

## BREED

Chihuahua

## SEX

Spayed Female

## AGE

10

## WEIGHT

16.5 Pounds

## INTERPRETED BY

Alicia Angosto  
Guerrero, DMV,  
PgDip, MSc.

## IMAGING PERFORMED BY

Dr. Wes Spangler

## HOSPITAL NAME

TotalBond VH- Paw  
Creek

## REFERRING VET

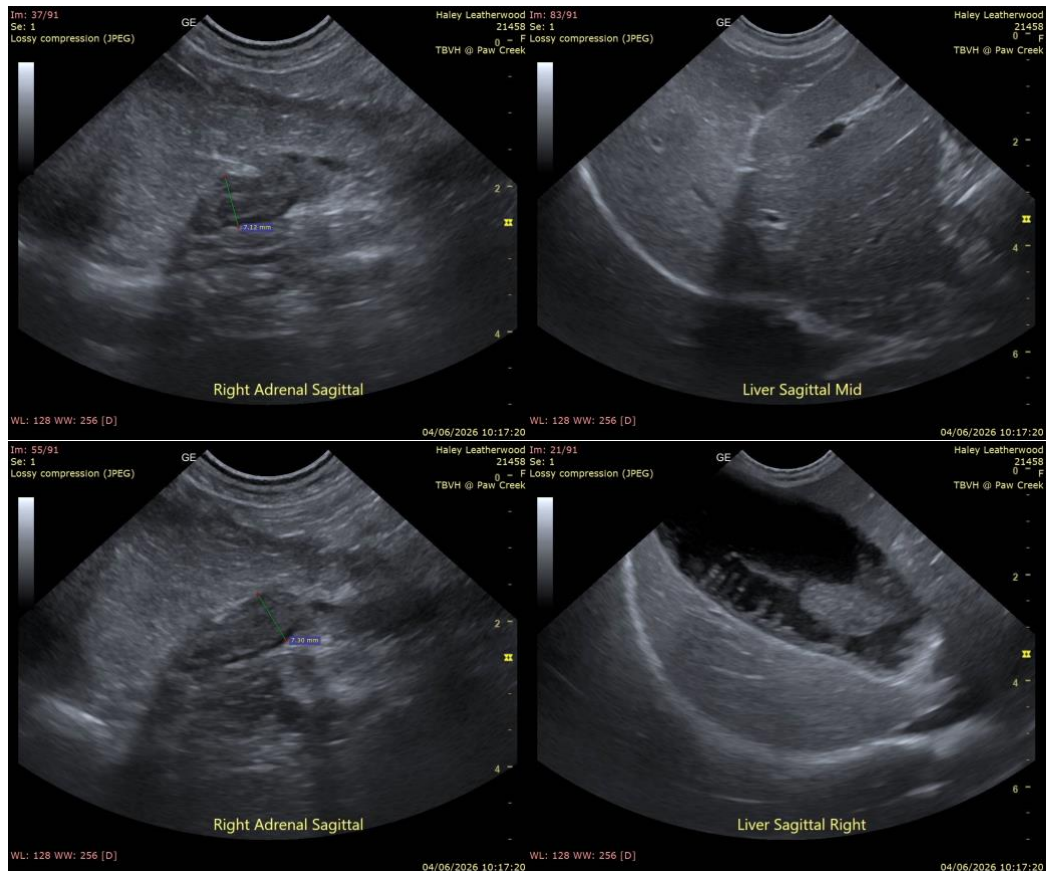
Dr. Wes Spangler

## INVOICE

37352

## DATE

6/4/26



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.

Alicia Angosto Guerrero, DMV, PgDip, MSc.

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