



## PATIENT

Hose B Bisbee Animal  
Shelter

## SPECIES

Canine

## BREED

Chihuahua

## SEX

Intact male

## AGE

6 months

## WEIGHT

4 lbs

## INTERPRETED BY

Eric Lindquist, DMV  
DABVP, Cert. IVUSS

## IMAGING PERFORMED BY

Gudrun Gunther

## HOSPITAL NAME

New Frontier Animal  
Medical Center

## REFERRING VET

Dr. Gunther

## INVOICE

72109

## DATE

3/2/26

## PRESENTING CLINICAL SIGNS

- History of elevated liver enzymes (mild). Had a neurologic episode previously. Patient is about 1/2 the size of his litter mate. Currently no neurologic symptoms. Concerned for portosystemic shunt
- CHEM 10 - ALT 210 (10-125) ALP normal BG normal Creatinine low 0.4 (0.5 - 1.8)

## ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

### Urinary System

The **urinary bladder**, trigone, and pelvic urethra presented normal thicknesses and normal tone. The ureters were not visible which is normal. No uroliths or sediment were visualized and anechoic urine was present. No evidence of inflammatory or neoplastic changes was noted. Ureteral papillae were normal.

The **kidneys** revealed normal size and structure, corticomedullary definition and ratio for this age. The cortices presented largely uniform texture with normal echogenic relationship to liver and spleen. Medullary structure differed distinctly from the cortex and no evidence of pelvic dilation was present. The capsules were acceptably uniform without significant irregularities. The right kidney measured 3.42 cm. The left kidney measured 3.23 cm.

### Adrenal Glands

Both **adrenal glands** were visualized and recognized as having normal shape, size, position and echogenicity for this breed. The phrenic vasculature, glandular echogenicity and detail were unremarkable. Capsule, cortex, and medullary definition were normal for this age patient. The left adrenal gland measured 1.26 x 0.25 cm at the cranial pole and 0.33 cm at the caudal pole. The right adrenal gland measured 0.54 cm at the cranial pole and 0.4 cm at the caudal pole.

### Spleen

The **spleen** presented a smooth homogeneous parenchyma hyperechoic to liver and renal cortical parenchyma. The capsule was smooth without noticeable expansion or deviation from within the spleen or adjacent pathology. The splenic vasculature demonstrated normal volume without signs of congestion or thrombosis. No sonographic evidence of acute or chronic inflammatory, neoplastic, or infarctual changes was noted.

### Liver

The **liver** was slightly subnormal in size. The intrahepatic vascular volume was noted. There was no evidence of intrahepatic and extrahepatic shunting. Portal vein branching appeared to be normal. Portal vein to vena cava ratio was 1:1. The gallbladder and common bile duct were normal.



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**Gastrointestinal**

Examination of the **gastrointestinal tract** revealed a stomach and intestine free of stasis, of normal wall thickness, acceptable curvilinear mural detail, and peristaltic activity. Small and large intestine demonstrated normal luminal chyme and stool consistency respectively. No obstructive or overt infiltrative disease was noted. No associated abnormal lymphatic activity was noted.

**Pancreas**

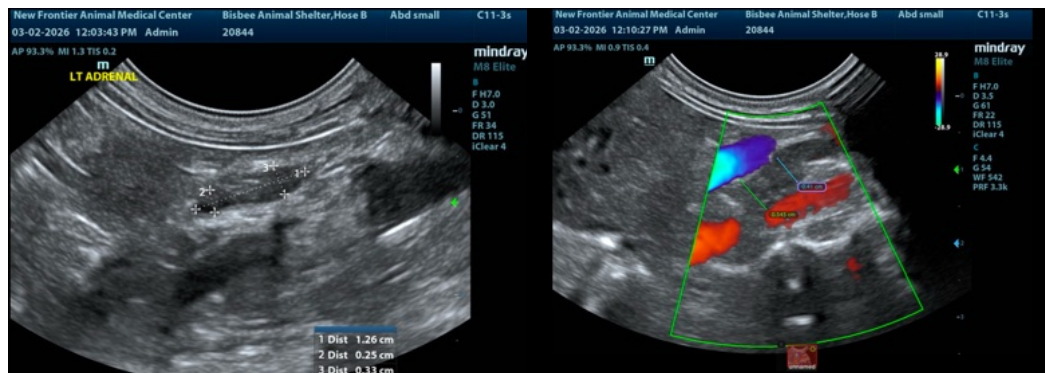
The base and limbs of the **pancreas** were observed to be largely isoechoic to surrounding omental fat. Pancreatic duct and capsular contour were acceptably normal and parenchyma respected normal curvilinear patterns. No overt evidence of active inflammatory or neoplastic disease was noted.

**ULTRASONOGRAPHIC FINDINGS**

Normal abdomen.

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

There was no evidence of macroscopic shunting. If bile acid elevations are present then I cannot rule out microvascular dysplasia/portal hypoplasia. FNA of the liver or core liver biopsy would be appropriate for further definition to assess if the liver enzymes, yet structurally the liver appears normal other than minor microhepatica which may be a normal variant possibly related to portal vein hypoplasia.





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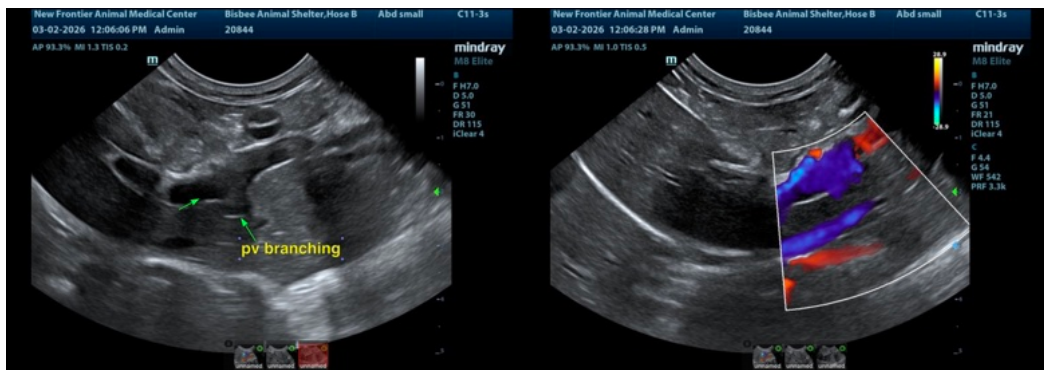
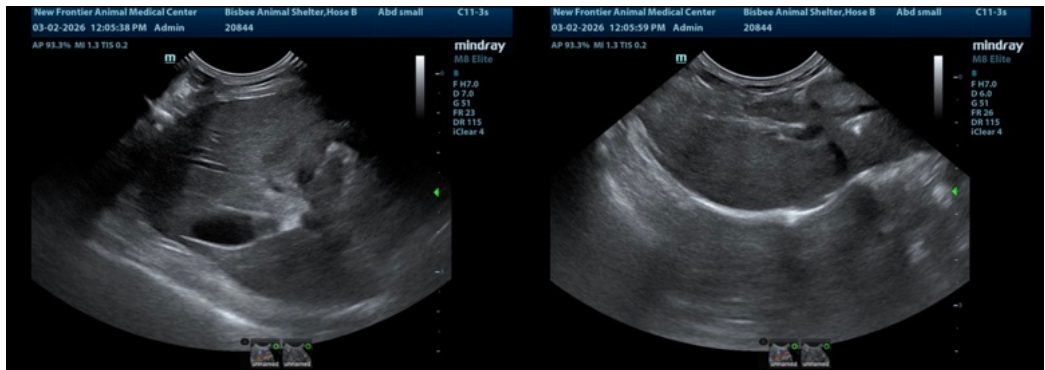
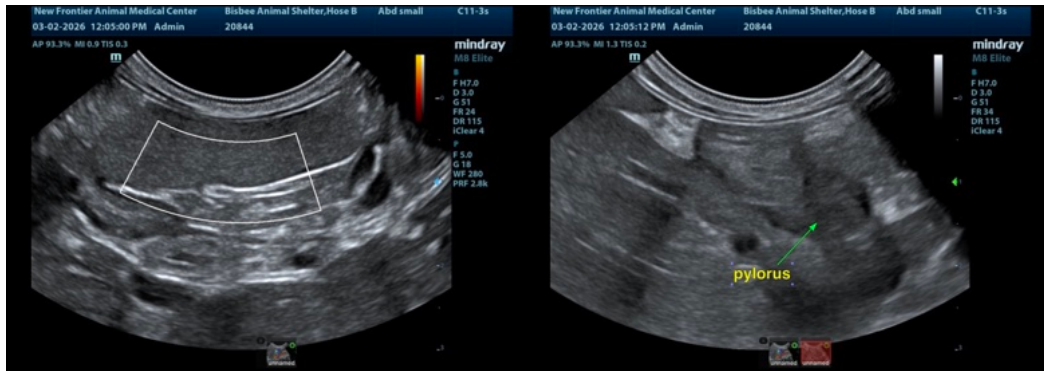
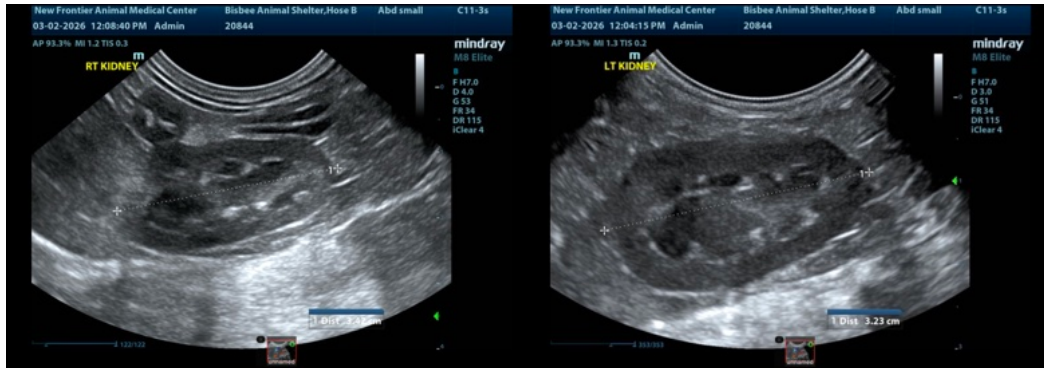
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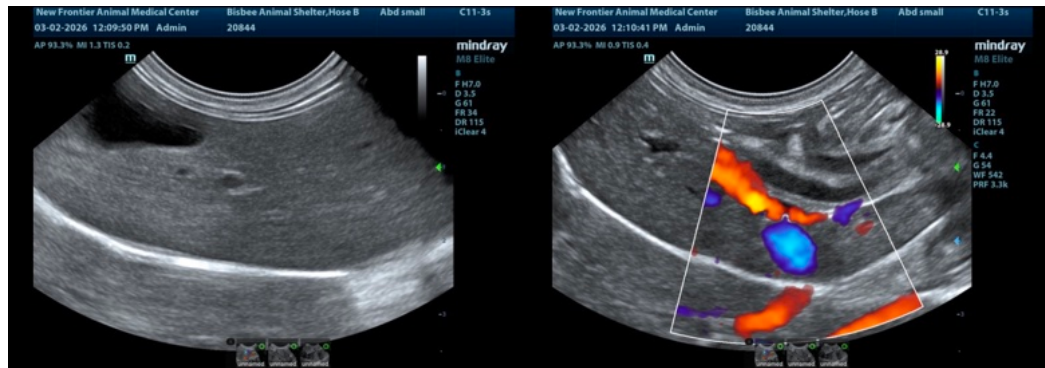
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

Eric Lindquist, DMV, DABVP (CFM), Cert. IVUSS, CEO of SonoPath.com

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