



## PATIENT

Darla Dills

## SPECIES

Canine

## BREED

Shih Tzu Mix

## SEX

Spayed female

## AGE

5 months

## WEIGHT

8.0 lbs

## INTERPRETED BY

Remo Lobetti, BVSc,  
MMedVet (Med),  
PhD, Dipl. ECVIM

## IMAGING PERFORMED BY

Dr. Whitesell

## HOSPITAL NAME

Dickson AC

## REFERRING VET

Dr. Hovis

## INVOICE

77678

## DATE

5/19/26

## PRESENTING CLINICAL SIGNS

Slow to recover from Spay, BUN and Creat low, ALT high. Suspect congenital Portosystemic Shunt  
Post-prandial bile acids test: 250 umol/L CBC: MCV 53.9 fL (low), MCH 18.3 pg (low), Monocytes 1.63 K/mcL (high), Platelets 135 K/mcL (low) Chem: Creatinine 0.2 mg/dL (low), BUN 5mg/dL(low), ALT 350 U/L (high), GGT 8 U/L (high), Amylase 158 U/L (low)

## ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

### *Urinary System*

The urinary bladder is full with a normal thickness and smooth appearance of the wall. Normal anechoic urine with no sediment or uroliths evident.

Normal appearance of the trigone area, proximal urethra, and iliac blood vessels.

Normal appearance and size of the iliac lymph nodes. Ureters not visualized, which can be considered a normal finding.

The kidneys are bilaterally enlarged (left measured 4.8 cm, right measured 5.1 cm), architecture, echogenic appearance, cortico-medullary differentiation, which maintains a 1:3 cortex to medulla ratio, pelvis, and capsule. No infarcts, mineralization or renoliths evident. Normal color flow pattern is evident in both kidneys.

### *Adrenal Glands*

Normal shape, echogenic appearance, size, position, and appearance of the visible peri-adrenal vasculature. Left adrenal gland measured 0.29 cm and 0.35 cm in width. The right adrenal gland measured 0.34 cm in width.

### *Spleen*

Normal size and echogenic appearance. Smooth homogenous parenchyma and regular curvilinear capsule. Normal volume of the splenic vasculature without any overt congestion or thrombosis evident. No inflammatory, neoplastic, infarction, or infiltrative changes evident. The spleen measured 1.3 cm in width.

### *Liver*

The liver is small in size with a normal echogenic appearance, decreased portal markings, and regular curvilinear capsule. No nodules or masses evident. Normal appearance of the hepatic and portal vasculature.



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## ***Gallbladder***

The gallbladder is full containing normal anechoic bile. Normal thickness and echogenic appearance of the wall. Normal size and appearance of the cystic and common bile duct.

## ***Gastrointestinal***

Normal appearance of the stomach, duodenum, small intestine, ileo-cecal junction, and colon with no loss of layering, 1:3 muscularis to mucosa ratio, normal wall thickness and peristaltic activity, and no distension of the lumen.

## ***Pancreas***

The visible sections of the pancreas are of normal size and echogenic appearance with a regular capsule. Normal echogenic appearance of the mesentery and fat surrounding the pancreas.

## ***Free Abdomen***

Normal mesenteric lymph nodes.

No ascites evident.

## **ULTRASONOGRAPHIC FINDINGS**

- Microhepatica
- Bilateral renomegaly

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

With the presenting clinical signs and severely elevated post prandial bile acids, the most likely etiology for the microhepatica would be portosystemic shunt with primary portal vein hyperplasia a possible differential diagnosis.

The renomegaly would be secondary to a possible portosystemic shunt or primary portal vein hyperplasia.

Further assessment would be CT angiography and possible liver biopsy.

Specific therapy would be dependent on an etiological diagnosis.

Management of a portosystemic shunt would be surgical attenuation or medical management using a low protein diet and lactulose.



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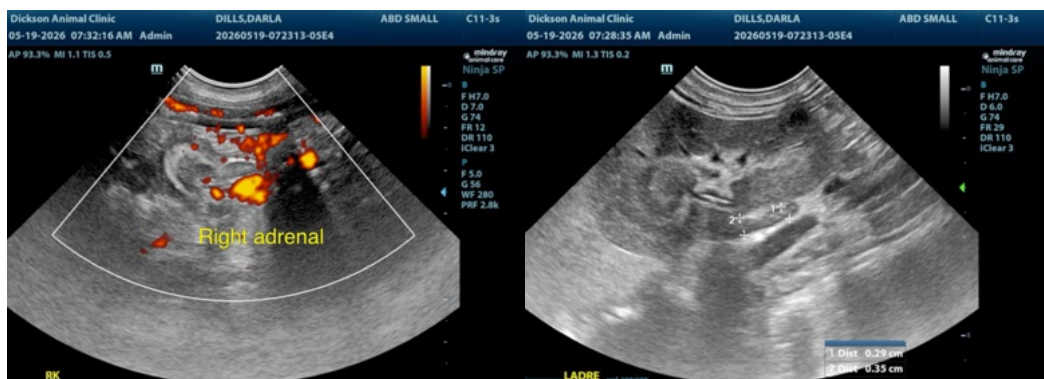
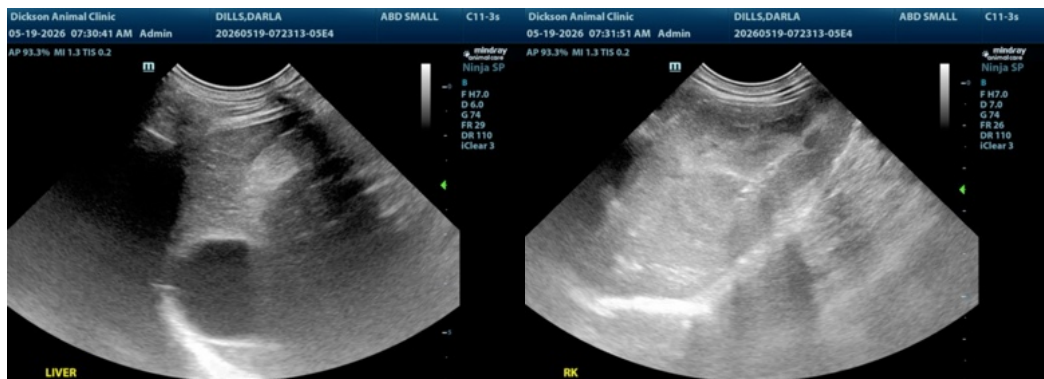
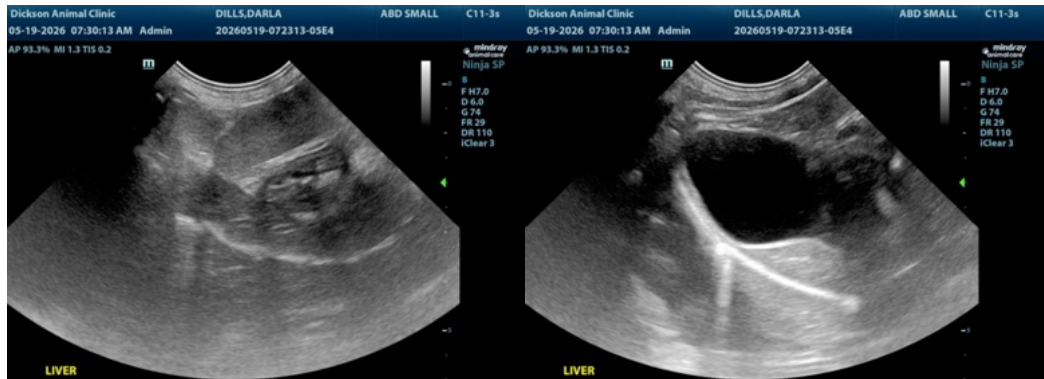
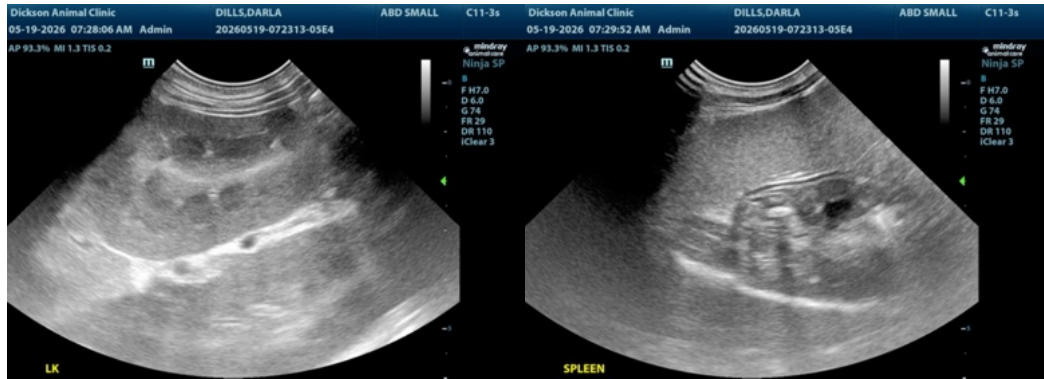
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

Remo Lobetti, BVSc, MMedVet (Med), PhD, Dipl. ECVIM (Internal Medicine)

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