


PATIENT

Ashwina Selva

PRESENTING CLINICAL SIGNS

No specific clinical signs, noted elevated ALT on bloodwork pre-dental. Has not improved with liver medications. Zentonil 100mg

SPECIES

Canine

Abnormal PE/Chem/CBC/UA Results: Elevated ALT

BREED

Chihuahua X

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN
Urinary System

The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of 2.0 cm exhibited normal thickness and tone. Anechoic urine was present in the lumen with no uroliths, sediment or calculi. The ureteral papillae were normal. The ureters were not visible which is normal. No evidence of inflammatory or neoplastic changes was noted.

SEX

MN

No evidence of pathology associated with the residual prostate was noted.

AGE

5 years

The area of the aortic trifurcation was free of pathology.

Normal size and margination were present in the kidneys. A normal 1:3 cortex / medulla ratio and normal corticomedullary definition were maintained. The echogenicity of the cortex was similar to or slightly less than normal liver parenchyma while the medulla echogenicity was hypoechoic to the cortex with no evidence of pelvic dilation. The left kidney measured 3.4 cm in length. The right kidney measured 3.8 cm in length.

WEIGHT

9 lbs.

Adrenal Glands
INTERPRETED BY

 R. McKenzie Daniel,
 DVM, DABVP

The left adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 1.0 cm length x 0.42 cm width at the caudal pole. The right adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The right adrenal gland measured 1.3 cm length x 0.48 cm width at the caudal pole.

**IMAGING
 PERFORMED BY**

Crystal Hill

Spleen
HOSPITAL NAME

 Creditview-Eglington
 AH

The spleen exhibited a finely textured and homogenous parenchyma which was hyperechoic to the liver and renal cortical parenchyma. The capsule was smooth and regular without apparent expansion. The splenic vasculature at the hilus was normal in volume with no evidence of congestion or thrombosis. Acute to chronic inflammatory, neoplastic, or benign parenchyma changes were not noted.

REFERRING VET

Dr. Ghobrial

Liver/ Gallbladder

The liver exhibited subjective mild subnormal size with normal structure and contour. The liver parenchyma was uniform and hypoechoic to the spleen with a mild coarse echotexture. The hepatic and portal vasculature were normal in appearance without signs of congestion. The gallbladder was non-distended in size with thin walls and primarily anechoic luminal content. The cystic and common bile ducts were normal.

INVOICE

12978

DATE

1/6/22


PATIENT
Gastrointestinal

Ashwina Selva

The stomach presented intact and sonographically unremarkable wall layering with mild retained anechoic gastric fluid. The ventral gastric body wall width measured 0.37 cm. No evidence of retained gastric ingesta was noted.

SPECIES

Canine

The small intestine presented intact wall layering with 1:3 muscularis/mucosa ratio. The lumen of the small intestine was empty with no signs of ileus, obstruction, or foreign material. The jejunum wall width measured 0.25 cm.

BREED

Chihuahua X

Normal visible colon wall layers were present with generalized non-formed feces present.

SEX

MN

Pancreas

The parenchyma of the left limb, body, and right limb of the pancreas presented isoechoic to the adjacent omental fat. A normal curvilinear capsule contour of the pancreas was present. The visible pancreatic duct was normal. No signs of active inflammation or neoplastic disease were evident.

AGE

5 years

Free Abdomen

No overt lymphadenopathy or peritoneal effusion was present.

WEIGHT

9 lbs.

ULTRASONOGRAPHIC FINDINGS
Primary Findings

- Subjective mild subnormal liver size exhibiting uniform parenchyma and subjective normal vascular volume
- Sonographically unremarkable gallbladder
- Mild retained gastric fluid - potential for mild gastric hypomotility
- Nonformed feces and colon

INTERPRETED BY

 R. McKenzie Daniel,
 DVM, DABVP

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Given the normal hepatic intervacular volume, as well as lack of urinary system mineralization, calculi, and lack of reported clinical signs in this patient with no overt evidence of a portosystemic shunt which is considered unlikely, primary hepatic parenchymal disease such as nonspecific inflammatory hepatopathy or possible portal hypoplasia / microvascular dysplasia may be present. Assessment of hepatic functionality including fasting and post prandial bile acids would be appropriate. If post prandial bile acids are suggestive of nonobvious shunt i.e., (post prandial bile acids >100), advanced imaging may be indicated. However, if mild to moderate post prandial bile acid elevations, some or all of the following protocol could be considered. Hepatic core surgical biopsy may be required for a definitive diagnosis. FNA could be considered to assess for potential inflammatory cell type if present.

IMAGING PERFORMED BY

Crystal Hill

HOSPITAL NAME

 Creditview-Eglington
 AH

REFERRING VET

Dr. Ghobrial

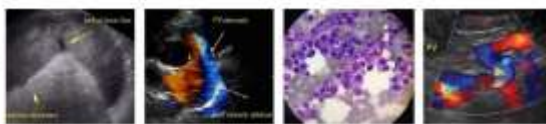
INVOICE

12978

DATE

1/6/22

Royal Canin Hepatic Support diet or Hills L/D, Metronidazole (7.5 mg/kg PO bid) over the next 14 days, **Lactulose** (Oral: 3.1-3.7 g/5 ml lactulose in a syrup base) long term to target 2-3 soft stools/day, with a **high-quality protein supplement** of minor amount of **yogurt** or **cheddar cheese**. Monitor bile acids, with attention paid to dropping albumin, BUN or cholesterol. SAME and nutraceuticals as needed. **Ursodiol** (10-15 mg/kg p.o. q24h) can be considered as hepatoprotectant and to enhance



PATIENT

Ashwina Selva

bile flow. **Zinc** serum level keep between 200—500 ug/dl. If deficient then Tx zinc acetate 1-3 mg/kg/day. Gastrointestinal protectants are recommended if the patient is anorexic.

SPECIES

Canine

BREED

Chihuahua X

SEX

MN

AGE

5 years

WEIGHT

9 lbs.

INTERPRETED BY

R. McKenzie Daniel,
DVM, DABVP

IMAGING PERFORMED BY

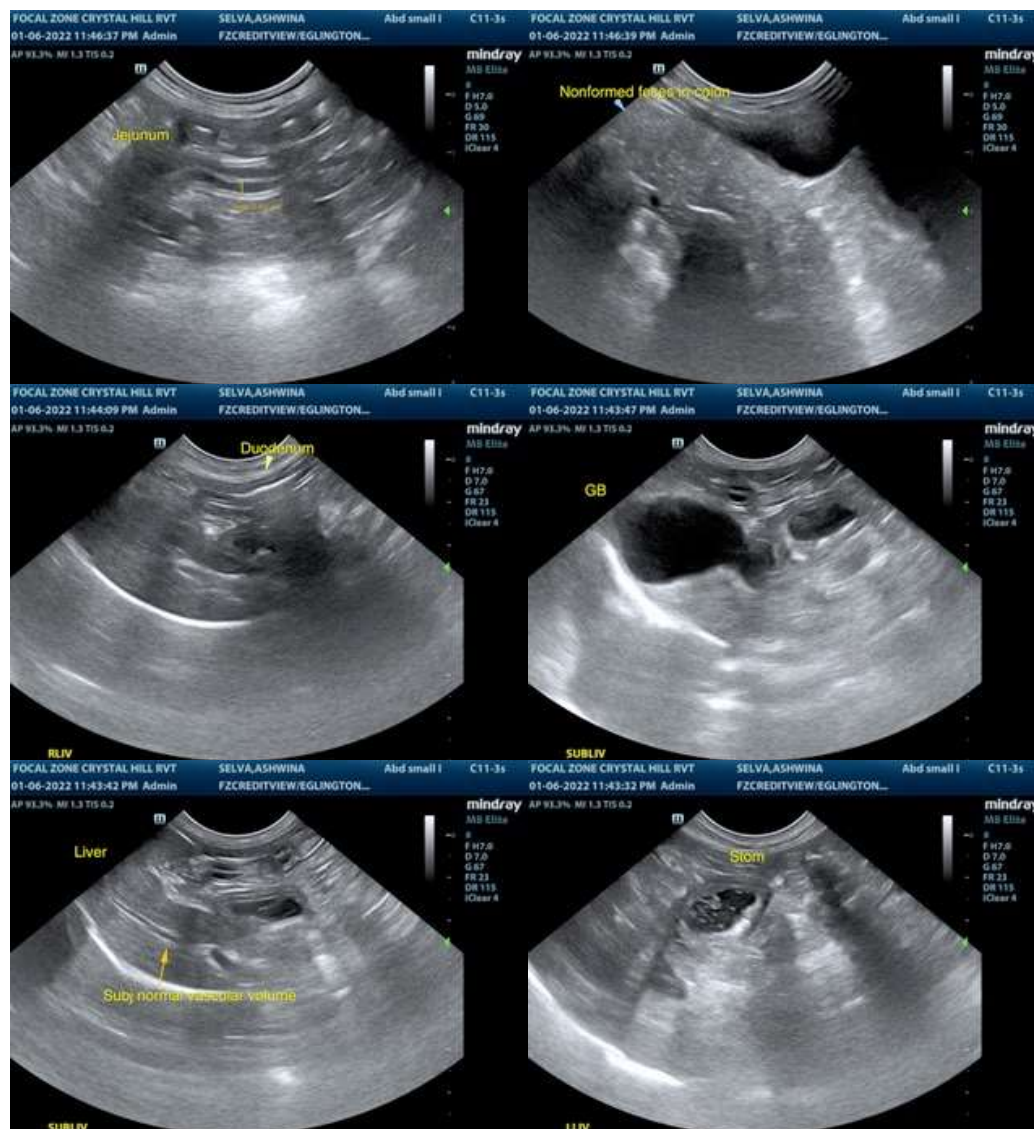
Crystal Hill

HOSPITAL NAME

Creditview-Eglington
AH

REFERRING VET

Dr. Ghobrial

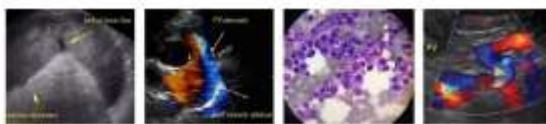


INVOICE

12978

DATE

1/6/22



PATIENT

Ashwina Selva

SPECIES

Canine

BREED

Chihuahua X

SEX

MN

AGE

5 years

WEIGHT

9 lbs.



INTERPRETED BY

R. McKenzie Daniel,
DVM, DABVP

IMAGING PERFORMED BY

Crystal Hill

HOSPITAL NAME

Creditview-Eglington
AH

REFERRING VET

Dr. Ghobrial

INVOICE

12978

DATE

1/6/22

The information and recommendations provided are based on the images presented by the referring veterinarian. 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.

R. McKenzie Daniel, DVM, DABVP (Canine / Feline Practice)
info@SonoPath.com