



**PATIENT PRESENTING CLINICAL SIGNS**

**PATIENT** Pebbles Fernandez History: Episodes of collapse, most recent in June. Most recently increased RR while laying down, seemed restless. Gall bladder sludge on AFAST. Currently on Ursodiol.

**SPECIES** Abnormal PE/Chem/CBC/UA Results: Elevated ALT 175, Elevated ALP 1546, mild leukopenia (0.84) and mild increase in RBC (9.06)

Canine

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**BREED** *Urinary System*

Dachshund The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of 3.0 cm exhibited normal thickness and tone. Anechoic urine was present in the lumen with no uroliths or sediment. The ureteral papillae were normal. The ureters were not visible which is normal. No evidence of inflammatory or neoplastic changes were noted. Aortic trifurcation was normal.

**SEX**

Spayed Female Normal size and margination was present in the kidneys. A normal 1:3 cortex / medulla ratio was maintained. The medulla and cortices were uniform in texture with some increased echogenicity and loss of corticomedullary symmetry and definition expected for the age of the patient. No evidence of pelvic dilation was present. The left kidney measured 4.2 cm in length. The right kidney measured 4.9 cm in length.

**AGE**

13 Years

*Adrenal Glands*

**WEIGHT**

7.4 kg

The bilateral adrenal glands were normal in size. Mild parenchyma heterogeneity and mild capsule asymmetry was present. The left adrenal gland measured 1.8 cm length x 0.45 cm width in the caudal pole. The right adrenal gland measured 1.7 cm length x 0.57 cm width in the caudal pole. No evidence of overt adrenal hyperplasia or tumors.

**INTERPRETED BY**

*Spleen*

R. McKenzie Daniel, DVM,  
DABVP (Canine and  
Feline)

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.

**IMAGING PERFORMED BY**

*Liver*

Crystall Hill

**HOSPITAL NAME**

The liver presented enlarged in size. The parenchyma of the liver was subjectively normal in echogenicity compared to the spleen and renal cortices. The liver parenchyma was uniform with a mildly coarse echotexture. The capsule of the liver was symmetrically rounded to mildly swollen in margination. The hepatic and portal vasculature were normal in appearance without signs of congestion. The gallbladder was non distended in size with non-dependent yet non-organized gallbladder debris. No evidence of gallbladder inflammation. The cystic duct and common bile ducts were normal without evidence of dilation.

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**REFERRING VET**

*Gastrointestinal*

Von Hausen

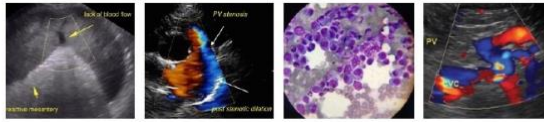
**INVOICE**

The stomach presented intact wall layering with a normal wall layer ratio. The lumen of the stomach contained echogenic to focally shadowing gastric ingesta without signs of obstruction or foreign material.

13194

**DATE**

9/20/21



**PATIENT**

Pebbles Fernandez

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.

Normal visible colon wall layers were present with apparent formed feces in lumen.

**SPECIES**

Canine

**Pancreas**

The pancreas was normal in size and contour with isoechoic to heterogeneous parenchyma compared to adjacent omentum. No signs of active inflammation or neoplasia. The appearance of the pancreas was likely consistent with age-related pancreatic changes and considered incidental.

**BREED**

Dachshund

**Free Abdomen**

No intraabdominal masses, lymphadenopathy or effusion.

**SEX**

Spayed Female

**ULTRASONOGRAPHIC FINDINGS**

**Primary Findings**

- Hepatopathy- subjectively benign
- Moderate gallbladder debris (non-mucocele)
- Bilateral mild chronic renal changes

**AGE**

13 Years

**Secondary Findings**

- Mild retained gastric ingesta- likely recent meal ingestion

**WEIGHT**

7.4 kg

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

**INTERPRETED BY**

R. McKenzie Daniel, DVM,  
DABVP (Canine and  
Feline)

The overall appearance of the liver was non-specific yet consistent with benign hepatopathy, vacuolar hepatopathy and mild cholestasis or primary concurrent inflammatory hepatic disease given the ALT elevation and presence of gallbladder debris are possible. Hepatic neoplasia considered an unlikely differential diagnosis. Assuming normal clotting status, hepatic FNA may be considered for screening cytology. Continued ursodiol and denamarin may prove beneficial.

**IMAGING PERFORMED BY**

Crystall Hill

An obvious cause of collapsing episode was not definitively evident within the abdominal cavity. Likewise, potential for underlying adrenal disease, although not definitive, may be considered less likely given the lack of reported clinical signs. Screening blood pressure is recommended. 3 view chest radiographs, if not done, recommended. Echocardiogram +/- ECG assessment may be indicated if collapsing episodes are persistent.

**HOSPITAL NAME**

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**PATIENT**

Pebbles Fernandez

**SPECIES**

Canine

**BREED**

Dachshund

**SEX**

Spayed Female

**AGE**

13 Years

**WEIGHT**

7.4 kg

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PERFORMED BY**

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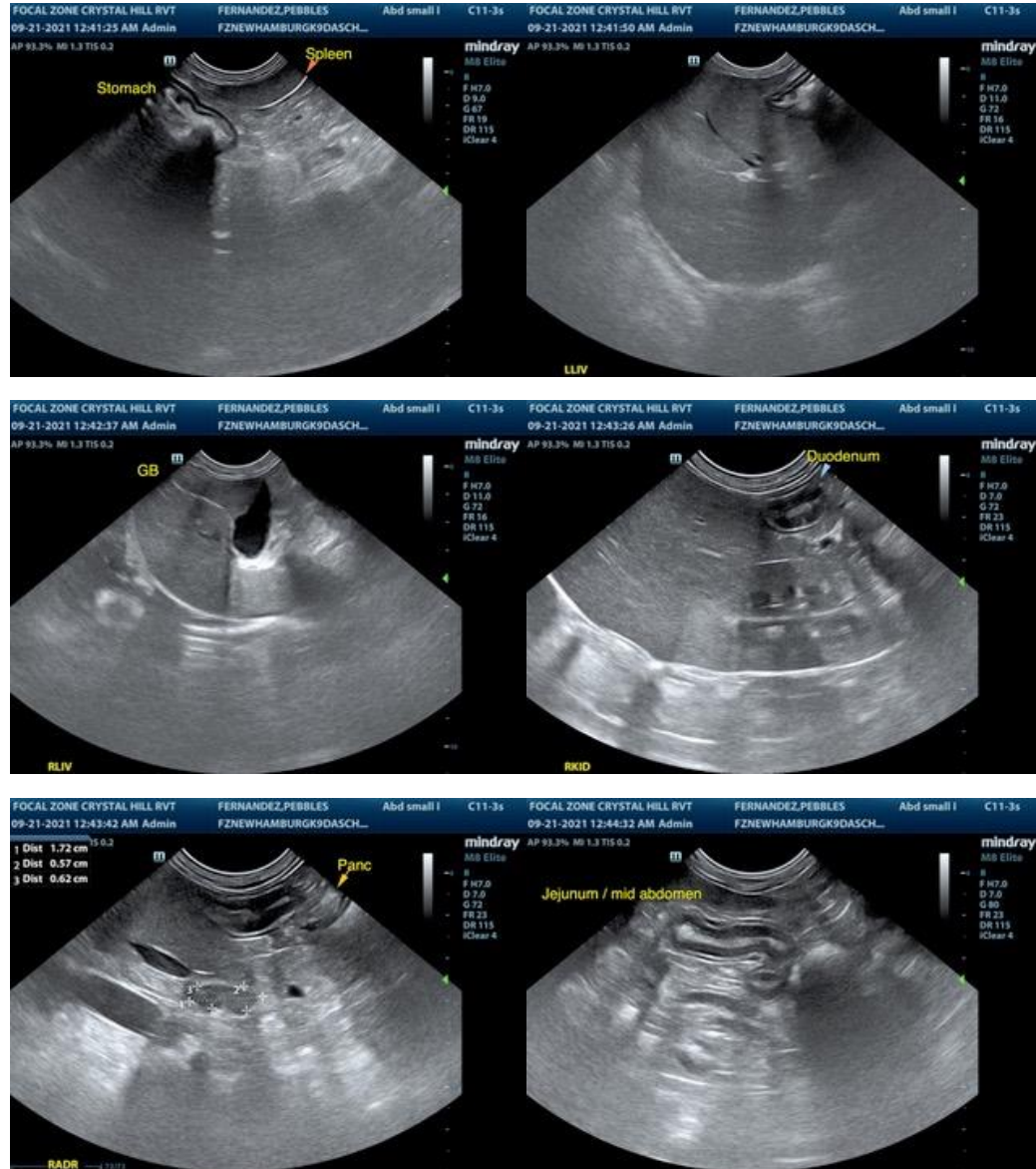
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

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