



**PATIENT**

Milo Vrana

**PRESENTING CLINICAL SIGNS**

History: Elevated liver enzymes. No current meds  
Abnormal PE/Chem/CBC/UA Results: ALKP 1559, USG 1.027, PH 6, Prot 2+, Ma 29.6

**SPECIES**

Canine

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**BREED**

Mix

**Urinary System**

The urinary bladder, trigone, and pelvic urethra are normal in thickness and the mucosal surface is smooth. The bladder lumen is moderately distended with anechoic urine. No masses, inflammatory changes or calculi are observed. Ureteral papillae and visualized portion of the proximal urethra, visible to a depth of 2 cm, are normal.

**SEX**

Neutered Male

The prostate is normal in size (1.17 cm in width) and shape. Parenchyma is homogenous. The prostatic urethra appears normal without evidence of dilation or obstruction.

**AGE**

8 years

The left kidney is normal size (6.92 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydronephrosis. Renal vasculature is normal.

**WEIGHT**

101 lbs

The right kidney is normal size (6.90 in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydronephrosis. Renal vasculature is normal.

**INTERPRETED BY**

Andrea Nicastro,  
DVM, Diplomate  
ACVIM (Small Animal  
Internal Medicine)

**Adrenal Glands**

The left adrenal gland is normal size (0.46 cm at cranial pole) (0.75 cm at caudal pole) (2.74 cm in length); normal shape; homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

**IMAGING PERFORMED BY**

Shari Reffi, CVT

The right adrenal gland is normal size (1.35 cm at cranial pole) (0.86 cm at caudal pole) (2.65 cm in length); normal shape; homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

**HOSPITAL NAME**

Newton Vet

**Spleen**

The spleen is normal in size (2.10 cm in width at the level of the hilus) with a normal capsular contour. There is appropriate echogenicity and echotexture. No focal lesions are observed. Splenic vasculature is normal.

**REFERRING VET**

Dr. Wyman-  
Greenwald

**Liver**

The liver is subjectively normal to slightly prominent in size with subtly irregular peripheral contours. The parenchyma is isoechoic relative to the spleen, and heterogenous and mottled in appearance with several ill-defined hypoechoic nodules/areas. Hepatic vasculature and intrahepatic biliary tracts are of normal volume with no evidence of congestion.

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The gall bladder is of normal contours and contains some dependent echogenic debris. The wall is normal in thickness. No choleliths are observed. The cystic and common bile ducts are normal/not

**DATE**

3/3/22



**PATIENT** seen.

Milo Vrana **Gastrointestinal**

**SPECIES** Canine  
The stomach and intestine are free of stasis and exhibit normal peristaltic activity. The gastric lumen is not distended. The gastric wall and pylorus are normal in thickness with a normal layering pattern. The small intestinal lumen is not dilated. The small intestinal wall thickness is normal with a normal layering pattern and appropriate mural detail. Discreet masses are not identified. The colonic wall is normal. No obstructive or overt infiltrative disease is noted.

**BREED** **Pancreas**  
Mix  
The region of the pancreas is isoechoic relative to surrounding omental fat. No obvious parenchymal abnormalities are observed. There is no evidence of regional inflammation or effusion.

**SEX** **Free Abdomen**  
Neutered Male  
The peritoneal cavity is normal. There is no evidence of inflammation or effusion. The abdominal lymph nodes are normal/not visible.

**AGE** **ULTRASONOGRAPHIC FINDINGS**  
8 years

**WEIGHT** **Primary Findings**  
101 lbs

- Non-specific diffuse hepatopathy. If the patient is asymptomatic, a benign process (i.e., regenerative nodular hyperplasia or vacuolar hepatopathy), would be favored. If the patient is exhibiting signs of illness, infiltrative neoplasia would also be a consideration. Therefore, correlation with the patient's clinical findings is recommended.
- Gall bladder debris, non-mucocele

**INTERPRETED BY** **Secondary Findings**  
Andrea Nicastro,  
DVM, Diplomate  
ACVIM (Small Animal  
Internal Medicine)

- Minor age-related renal changes

**IMAGING PERFORMED BY** **INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**  
Shari Reffi, CVT

- Consider hepatic tissue sampling (FNA or biopsy) to help rule out infiltrative neoplasia. Clotting times (i.e., PT/PTT), should be assessed prior any sampling procedure. If tissue sampling is not pursued at this time, serial monitoring (i.e., every 3 -4 months), of the patient's liver values is recommended to assess for progression.
- Given the proteinuria, a UPC is also recommended.

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**SPECIES**

Canine

**BREED**

Mix

**SEX**

Neutered Male

**AGE**

8 years

**WEIGHT**

101 lbs

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**IMAGING  
PERFORMED BY**

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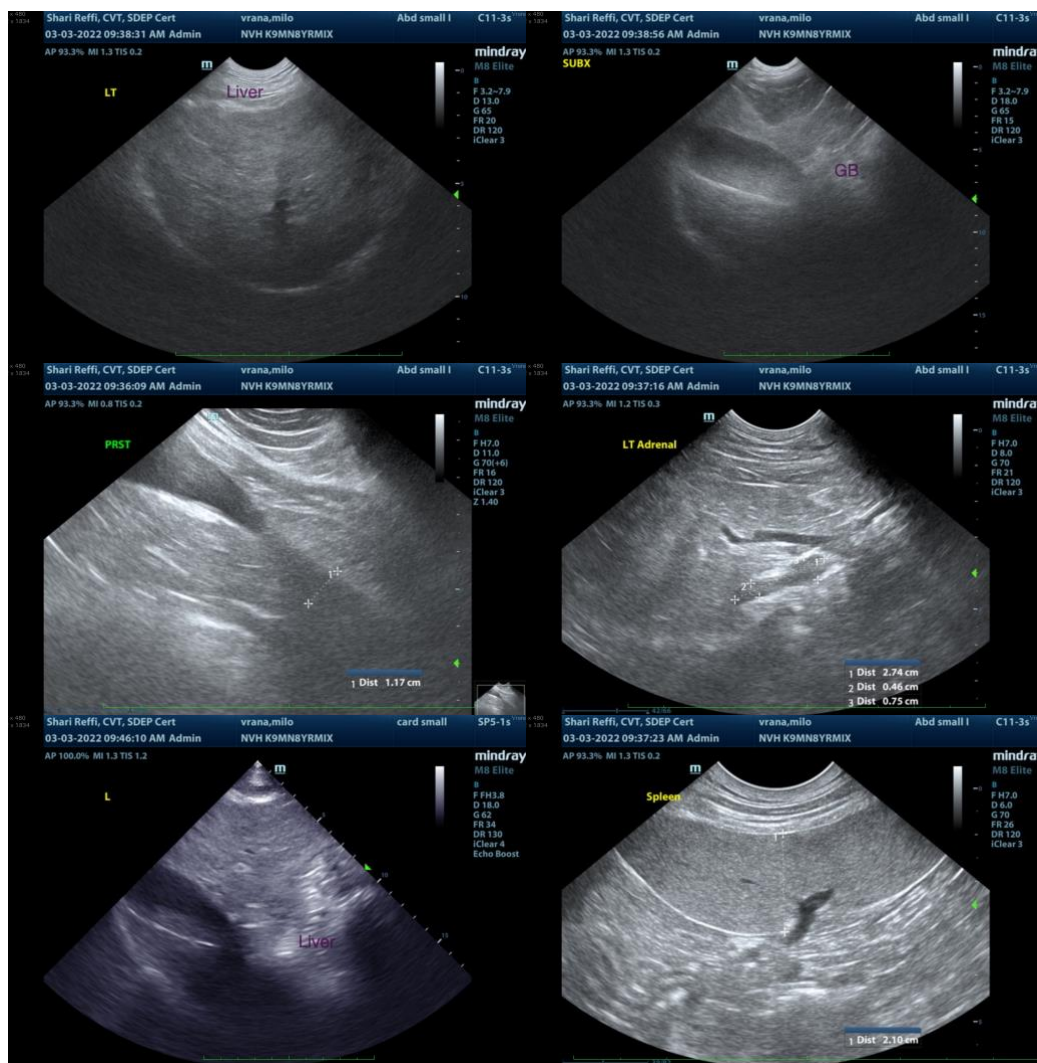
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## SPECIES

Canine

## BREED

Mix

## SEX

Neutered Male

## AGE

8 years

## WEIGHT

101 lbs

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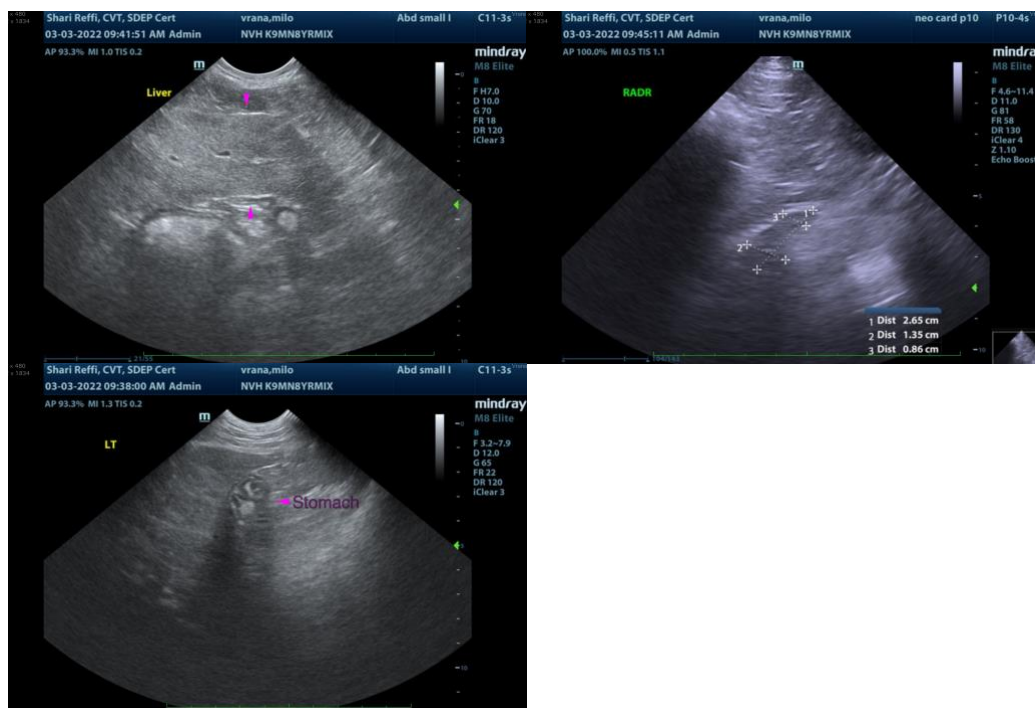
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

**Andrea Nicastro, DVM, Diplomate DACVIM (Small Animal Internal Medicine)**  
info@SonoPath.com