



**PATIENT PRESENTING CLINICAL SIGNS**

Onyx Hoff  
Elevated liver enzyme  
Decrease in energy level at home

**SPECIES**

Canine

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**BREED *Urinary System***

Labrador Retriever

The urinary bladder wall is normal in thickness and the mucosal surface is smooth. The bladder is moderately distended. Luminal contents are anechoic. No cystic calculi are observed. The region of the trigone and the proximal urethra, visible to a depth of 2-3 cm, are normal.

**SEX**

Male, neutered

The prostate is normal in size (0.87 cm in width) and shape. Parenchyma is homogenous. The prostatic urethra appears normal without evidence of dilation or obstruction.

**AGE**

6 Yrs.

The left kidney is normal size (7.10 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 hydroureter. Renal vasculature is normal.

**WEIGHT**

94 lbs.

The right kidney is normal size (8.80 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 hydroureter. Renal vasculature is normal.

**INTERPRETED BY**

Andrea Nicastro, DVM,  
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Animal Internal Medicine*)

***Adrenal Glands***

The left adrenal gland is normal in length with a slightly flattened contour (0.52 cm at cranial pole) (0.51 cm at caudal pole). The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

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The right adrenal gland is normal size (0.96 cm at cranial pole) (0.66 cm at caudal pole); 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.

***Spleen***

**HOSPITAL NAME**

Flowertown

The spleen is prominent in size (2.59 cm in width at the level of the hilus) with a curved/elongated contour. There is appropriate echogenicity and echotexture. No focal lesions are observed. Splenic vasculature is normal.

**REFERRING VET**

Dr. Hawk

***Liver***

The liver is subjectively normal in size with normal curvilinear peripheral contours. The parenchyma is hypoechoic relative to the spleen and slightly mottled in appearance. No distinct focal lesions are observed. Hepatic vasculature and intrahepatic biliary tracts are of normal volume with no evidence of congestion. The portal vein to caudal vena cava ratio is approximately 1:1. The gall bladder lumen is moderately distended. The wall is thin and smooth. Luminal contents are anechoic. The cystic and common bile ducts are normal/not seen.

**INVOICE**

15203

**DATE**

8/22/23



**PATIENT** *Gastrointestinal*

Onyx Hoff The gastric lumen is moderately distended with ingesta. The gastric wall is 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. The colonic lumen contains shadowing fecal material. There is no obvious evidence of an obstructive pattern.

**SPECIES**

Canine

**BREED**

*Pancreas*

Labrador Retriever

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**

Male, neutered

*Free Abdomen*

The peritoneal cavity is normal. There is no evidence of inflammation or effusion. The abdominal lymph nodes are normal/not visible.

**AGE**

6 Yrs.

*Other*

A brief echocardiogram reveals no evidence of pericardial effusion or obvious right atrial/auricular mass.

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**ULTRASONOGRAPHIC FINDINGS**

**Primary Findings:**

- The hepatic parenchymal changes, in conjunction with the liver enzyme pattern, is most consistent with a benign hepatopathy (i.e., age-related remodeling, minor regenerative nodular hyperplasia) with a lower possibility of more insidious hepatopathies.

**Secondary Findings:**

- The slightly flattened left adrenal gland may be a normal variant for this patient or may represent early atrophy (i.e., secondary to hypoadrenocorticism).

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

- Serial monitoring (i.e., every 3-4 months) of the patient's liver values is recommended. If liver values continue to increase, a repeat abdominal ultrasound +/- hepatic tissue sampling may be warranted.
- Given the patient's weight gain and lethargy, consider a T4/free T4 by equilibrium dialysis.



**PATIENT**

Onyx Hoff

**SPECIES**

Canine

**BREED**

Labrador Retriever

**SEX**

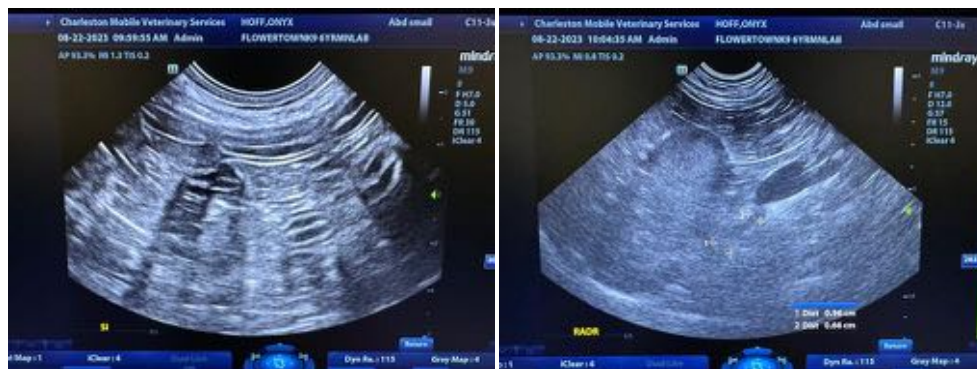
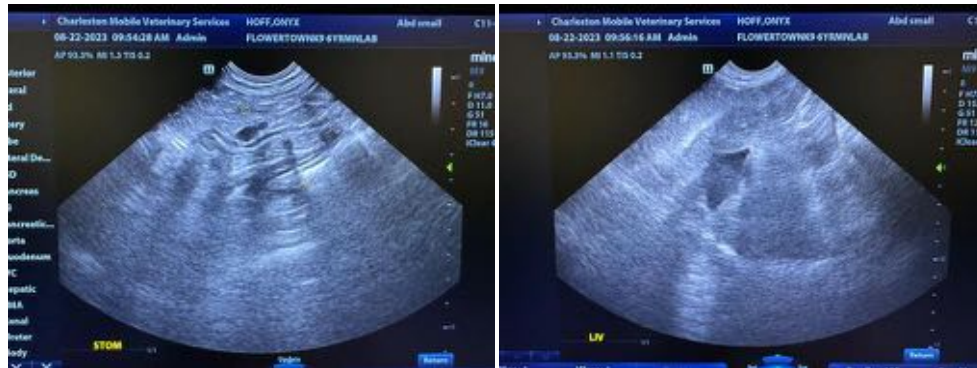
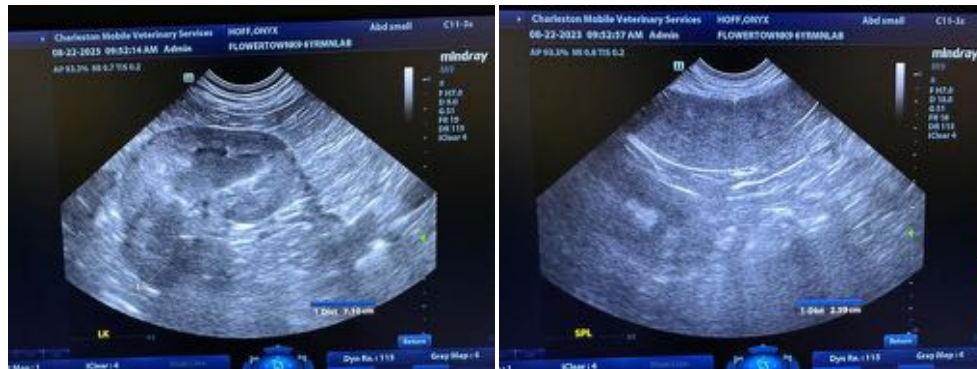
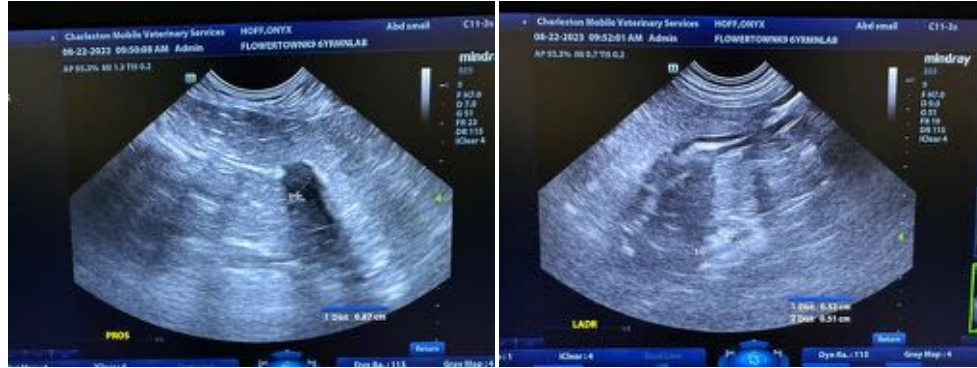
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Labrador Retriever

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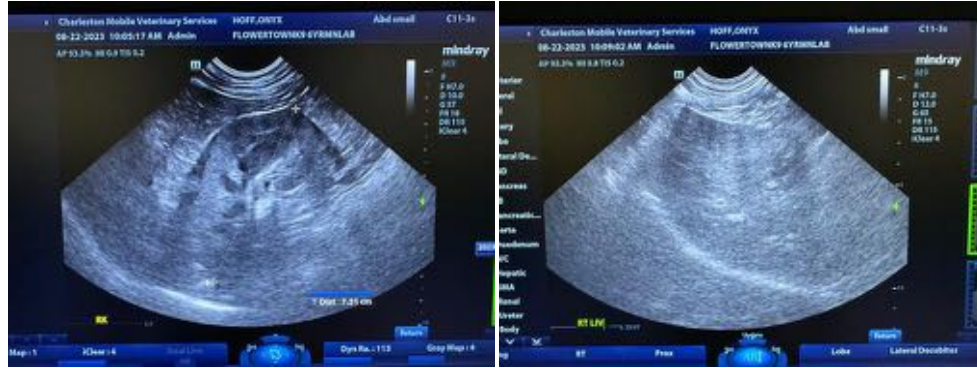
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**WEIGHT**

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**SEX**

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.

**AGE**

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.

**WEIGHT**

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