



**PATIENT PRESENTING CLINICAL SIGNS**

Chloey Giordano History: 2 lb weight loss in 2 months. Presented for lethargy and hyporexia. Significantly elevated liver enzymes.

**SPECIES** Abnormal PE/Chem/CBC/UA Results: Lym 0.99k; neut 13.23 k; Plt 120k; ALT 1579; ALP 1192; AST 1110, T bili 0.7, K 3.5

Canine

**BREED ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

Jack Russell Terrier

**Urinary System**

**SEX**

FS

The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of – 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 was noted.

**AGE**

9 years

The area of the aortic trifurcation was free of pathology.

**WEIGHT**

10.4 lbs.

Normal size and margination were 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 mild to moderate loss of corticomedullary symmetry and definition expected for the age of the patient. Scant pyelectasia was present in the left kidney. The left kidney measured 4.6 cm in length. The right kidney measured 4.9 cm in length.

**INTERPRETED BY**

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

**Adrenal Glands**

The left adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 0.61 cm width at the caudal pole and 0.57 cm width at the cranial pole. The right adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The right adrenal gland measured 0.47 cm width at the caudal pole and 0.54 cm width at the cranial pole.

**IMAGING PERFORMED BY**

Pamela Harrigan, RDCS

**Spleen**

The spleen was normal in size and contour. Primarily maintained finely textured homogeneous parenchyma noted with focal to intermittent, non-disruptive, subtly hypoechoic intraparenchymal nodules, an example of nodule size measured 0.3 cm in diameter.

**HOSPITAL NAME**

Norfolk County VS

**Liver/ Gallbladder**

The liver revealed generalized asymmetrical enlargement with areas of capsule asymmetry. Non-homogeneous to mild mixed echogenic parenchyma, exhibiting intermittent mildly expansive subtly hypoechoic parenchymal nodules, an example of nodule measured 2.6 cm in diameter.

**REFERRING VET**

Tami Ilovich, DVM

The gallbladder was non-distended in size with mild to moderately thickened to hypoechoic gallbladder walls were present. The gallbladder wall measured 0.3 cm. Anechoic content with mild luminal sludge present. The cystic and common bile ducts were normal.

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**Gastrointestinal**

**DATE**

4/28/22

The stomach presented intact wall layering with a normal wall layer ratio. The lumen of the stomach was empty with no signs of ileus, obstruction, or foreign material.



**PATIENT**

Chloey Giordano

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 duodenum wall measured 0.43 cm. The jejunum wall measured 0.29 cm.

**SPECIES**

Canine

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

***Pancreas***

The left limb, right limb, and base of the pancreas presented hypoechoic to heterogeneous echogenicity compared to adjacent omental fat. Mild asymmetrical capsule margination was present with mild variable parenchymal swelling and mild peripancreatic reactivity / inflammation. No overt evidence of neoplasia.

**BREED**

Jack Russell Terrier

***Free Abdomen***

**SEX**

FS

Generalized primarily perihepatic mesentery, along with mild volume primarily perihepatic free fluid.

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Intermittent, mildly prominent cranial mesenteric lymph nodes were present. These lymph nodes were homogenous, mildly hypoechoic and smoothly marginated. A normal width: length ratio was maintained (<0.5). Evidence of perilymphatic inflammation was evident.

**ULTRASONOGRAPHIC FINDINGS**

- Asymmetrical hepatomegaly with nonuniform to subtly nodular parenchyma
- Thickened gallbladder with mild luminal sludge
- Mild chronic renal changes
- Possible concurrent low-grade to chronic active pancreatitis
- Focal to intermittent subtle splenic nodules
- Mild volume, primarily perihepatic free fluid and cranial abdominal reactive mesentery

**WEIGHT**

10.4 lbs.

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**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

Although cytology is required for further assessment, the hepatic presentation is strongly suggestive of neoplastic criteria. Nonneoplastic etiologies such as generalized yet variable hepatitis, vacuolar hepatic changes, nonobstructive cholestasis or other hepatopathy possible yet thought less likely.

**IMAGING**

**PERFORMED BY**

Pamela Harrigan, RDCS

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Assuming normal clotting status, hepatic FNA, using a 25-gauge needle is recommended for screening cytology and further clarification with potential for oncology consult. Pending cytology, empirical therapy for nonspecific to variable hepatitis with as needed gastrointestinal support would be reasonable. Very guarded to potentially unfavorable prognosis pending additional diagnostics. Three-view chest radiographs suggested to rule out occult thoracic pathology as a contributing factor to the patients weight loss.

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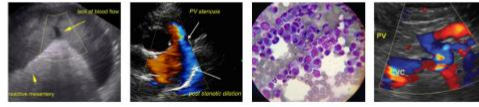
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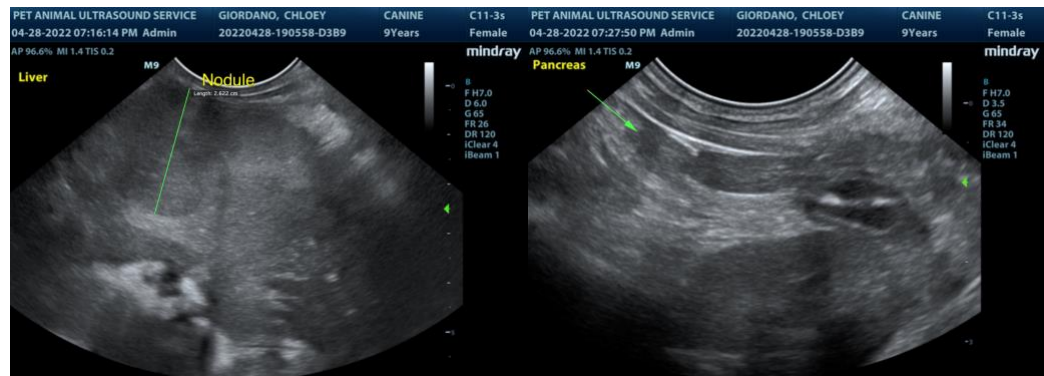
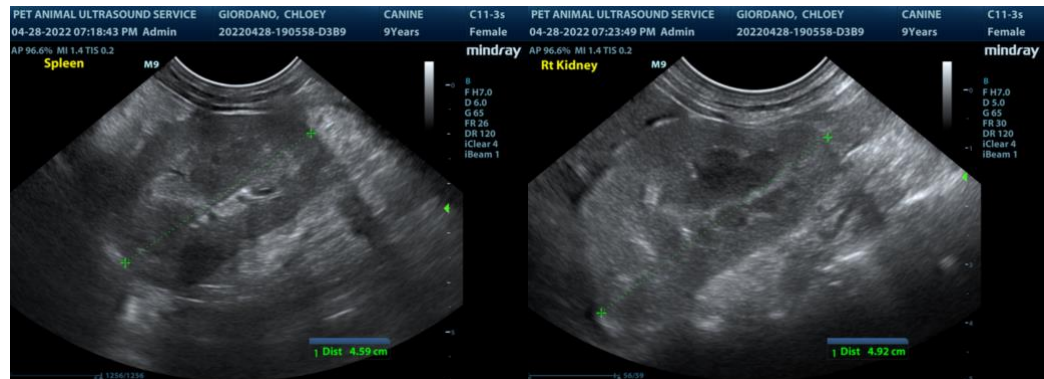
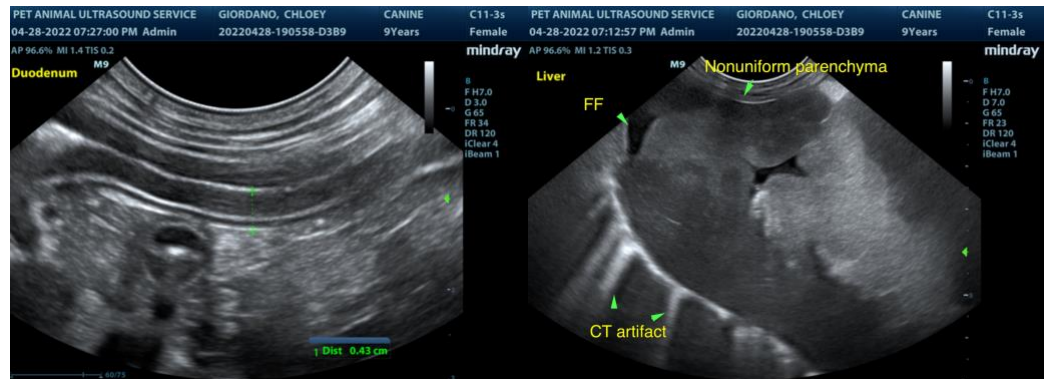
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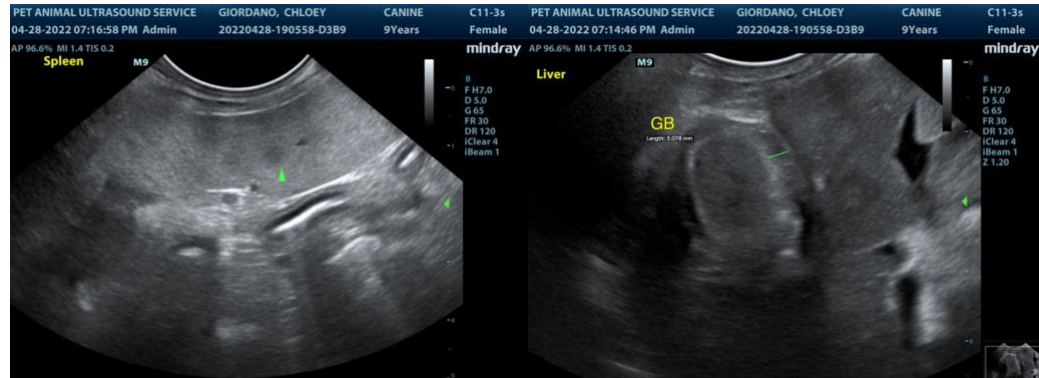
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

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