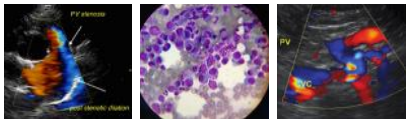
IMAGING PERFORMED BY

IntraPet.com



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**DATE**
2/24/23

**PATIENT**
Carly Galintino

**SPECIES**
Canine

**BREED**
German Shepherd

**SEX**
Spayed Female

**AGE**
2/27/16

**WEIGHT**
66.7 Pounds

**INTERPRETED BY**
Kathleen Sennello DVM, MS, Diplomate ACVIM (Small Animal Internal Medicine)

**HOSPITAL NAME**
Forest Hill Vet

**REFERRING VET**
Dr. Saad

**INVOICE**
21251

## PRESENTING CLINICAL SIGNS

History: Not eating, losing weight.

Current Medications: Amoxi 200mg 2 tabs BID, Denamarin Advanced over 51lbs- 1 SID 1 hour before feeding.
Lab Results: See attached.
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Declined.
Stat Report: Not requested.
Imaging Performed By: Rachel Brilhart, RDMS.

*Diagnostic utility of exam is limited due to lack of patient sedation (sedation declined).

## ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

### *Urinary System*

The urinary bladder is moderately distended with anechoic urine. The bladder wall, trigone, ureteral papillae and visible urethra (to a depth of 2.0 cm) appear normal with no evidence of wall thickening, mucosal irregularities, masses or cystic calculi.

The left kidney has a normal shape and size (7.65 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The right kidney has a normal shape and size (7.16 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

### *Adrenal Glands*

The region of left adrenal (Cranial to left renal artery) is unremarkable but the adrenal is not distinctly visualized. No evidence of a mass effect. Sedation is likely required for evaluation.

The region of the right adrenal (between right cranial kidney and vena cava) is unremarkable, but the adrenal is not distinctly visualized. No evidence of a mass effect. Sedation is likely required for evaluation.

### *Spleen*

The spleen is subjectively normal in size, echotexture is homogenous, and the splenic capsule is smooth with no irregularities. The blood flow through the hilus and splenic parenchyma appears normal. No focal parenchymal abnormalities are visualized.

### *Liver*

The liver is subjectively large in size, and echogenicity with smooth peripheral margins. The parenchyma is hypoechoic and heterogenous in echotexture with subtle, indistinct focal mottling. The visible portions of the vasculature and biliary tract appear normal. No focal nodules or cystic lesions are observed.

The gall bladder lumen is somewhat distended. Some areas of the wall appear mildly thickened with adherent debris. There is a large amount of primarily nonorganized echogenic debris present. No evidence of bile duct dilation is visualized, but there does appear to be hyperechoic tissue surrounding the gallbladder in some views. Sedation would likely be necessary for further evaluation of the bile duct.

### *Gastrointestinal*

The stomach contains minimal luminal contents. It measures at a normal thickness of <0.7 cm with some variability due to the presence of rugal folds. The distinction of the gastric wall layers is adequate and there is no impression of reduced peristaltic activity. No masses or focal lesions were observed.

The visualized areas of duodenum, jejunum and ileum have a relatively uniform diameter with minimal fluid distension. Wall thickness is normal. Bowel loops follow a curvilinear path with distinct wall layering maintaining the typical 1:3 muscularis:mucosa layer ratio. The duodenum measured as normal (0.61 cm in wall thickness) and the jejunum measured as normal (0.42 cm) Visualized peristalsis appears appropriate. There were no focal lesions consistent with obstruction or a mass effect observed.

The ileocecal junction was visualized and exhibited normal intact wall layering and is subjectively of normal thickness. Sections of colon are visualized with formed fecal material and gas shadowing distally. There is no observed focal or generalized colon wall thickening or loss of layering.

### *Pancreas*

The pancreas is prominent and mottled compared to the surrounding isoechoic mesentery. There is no evidence of nodules or cystic lesions. There is no evidence of regional mesenteric inflammation or fluid.

### *Free Abdomen*

There is a scant amount of free abdominal fluid. No lymphadenopathy is noted. The omentum appears hyperechoic around the liver and in some views of the gallbladder.

## ULTRASONOGRAPHIC FINDINGS

### Primary Findings

- Hypoechoic, heterogenous liver. The diffuse hepatic changes are non-specific and could be consistent with vacuolar hepatopathy, nodular hyperplasia, inflammatory/immune-mediated disease, fibrosis, extramedullary hematopoiesis, toxic hepatopathy (e.g., copper), infiltrative neoplasia (less likely) or other hepatopathy.

- Moderate to large gallbladder debris with surrounding hyperechoic mesentery. The surrounding inflammation could be secondary to the liver or the gallbladder. Consider possible cholangiohepatitis.

- Scant free abdominal fluid

### Secondary Findings

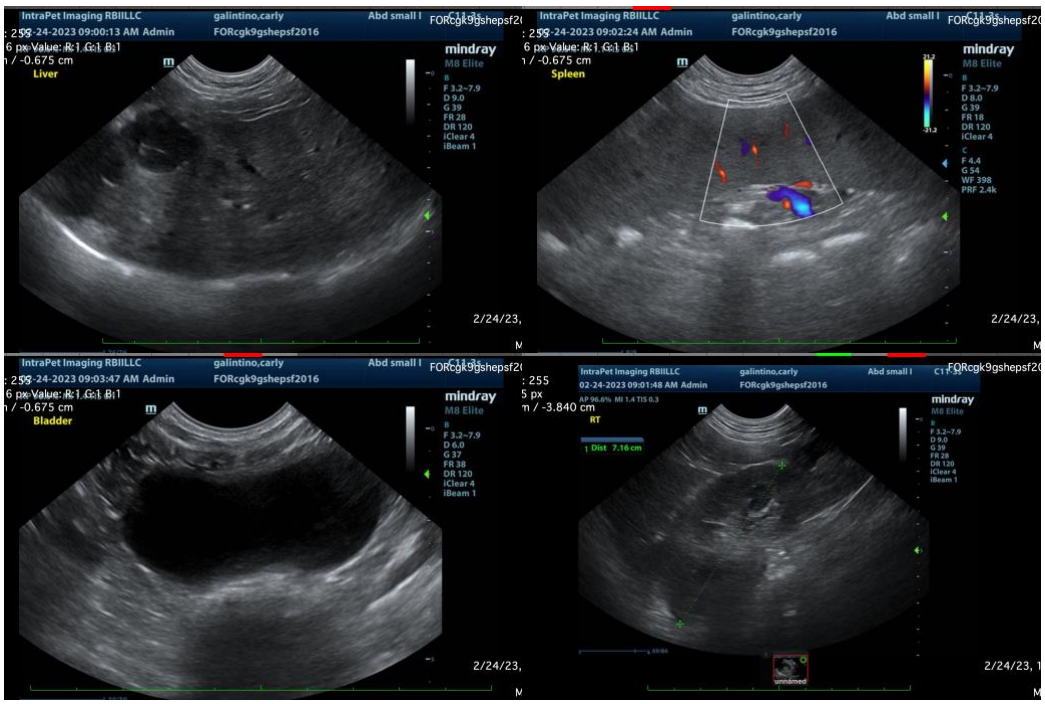
- Prominent mottled pancreas. The pancreatic changes are most consistent with age-related parenchymal remodeling, potentially secondary to a prior inflammatory episode, early fibrosis or chronic pancreatitis.

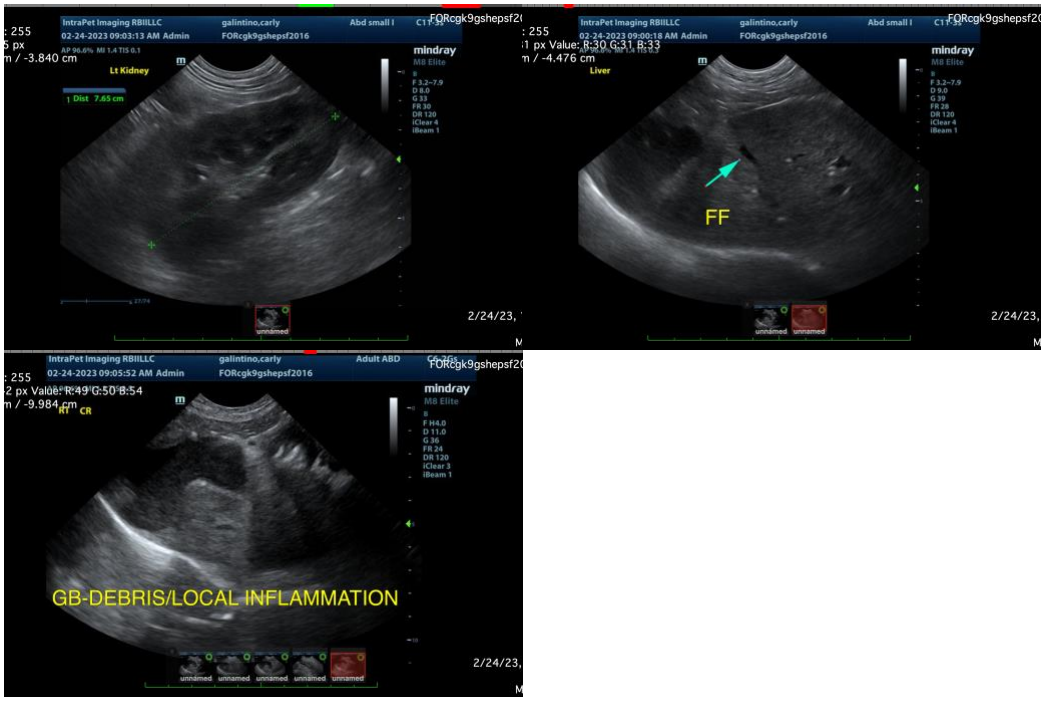
## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The liver is diffusely hypoechoic and heterogenous. This is a nonspecific finding, but there does appear to be some surrounding free fluid, possibly consistent with inflammation. Consider infectious and inflammatory hepatitis (infiltrative neoplasia would be a much less likely differential but possible). Recommend Leptospirosis titers and a fine needle aspirate of the liver (provided coagulation parameters are normal). The gallbladder appears somewhat prominent with a moderate amount of intraluminal material and some adherence to the gallbladder wall. These changes are not that significant or severe but there does appear to be some hyperechoic tissue surrounding the gallbladder in some views. This could be associated with generalized inflammation of the liver or could be secondary to cholecystitis, ruptured gallbladder, etc., although this seems less likely. The bile duct cannot be clearly visualized, likely because it is not dilated but lack of patient sedation/cooperation limits evaluation of the some of the finer structures. If liver cytology and Leptospirosis titers are not diagnostic, and there is no response to treatment for acute liver injury, then consider reevaluation of the gallbladder and bile duct, either with a repeat ultrasound under sedation or a contrast CT scan.

Additionally, consider any toxins, medications, etc., which may have caused acute liver injury.

Consider three view thoracic radiographs to rule out concurrent thoracic disease/involvement.






**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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