

**PATIENT**

Ren Steup

**SPECIES**

Canine

**BREED**

Mixed

**SEX**

Spayed Female

**AGE**

8 Years

**WEIGHT**

16.8 kg

**INTERPRETED BY**Brad Harris, DVM,  
DACVECC, DACVIM  
(cardiology)**IMAGING  
PERFORMED BY**

Maria Lara, DVM

**HOSPITAL NAME**Allure Veterinary  
Hospital & Urgent Care**REFERRING VET**

Katherine Roehl, DVM

**INVOICE**

73475

**DATE**

3/8/26

**PRESENTING CLINICAL SIGNS**

Patient presented with a history of vomiting on and off for a few months, on 3/4 with rDVM imaging was skipped and endoscopy was performed and biopsies were taken. 3/7 new onset of abdominal pain and diarrhea. In House BW consistent with pancreatitis.

Abnormal PE/Chem/CBC/UA Results: 3/8 12am CBC WNL Chem Total Protein 8.7 (5.2 - 8.2 g/dL) Albumin 4.2 (2.2 - 3.9 g/dL) ALT 212 (10 - 125 U/L) Lipase 2,957 (200 - 1,800 U/L) Catalylst Pancreatic Lipase 453 (0 - 200 U/L)

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN****Urinary System**

The urinary bladder, trigone, and pelvic urethra are unremarkable with normal wall thicknesses and normal tone. The ureters were not visualized, which is a normal finding. There are no uroliths or sediment noted, and anechoic urine is present. The ureteral papillae appear normal. There is no evidence of inflammatory, infiltrative, or neoplastic disease.

The kidneys are normal in size. The cortices are minimally hyperechoic with a slight decrease in corticomedullary distinction. Normal cortex to medulla ratio. No pyelectasis or pelvic dilation noted. Renal capsules are minimally irregular bilaterally. The left kidney measures 5.89 cm. The right kidney measures 6.0 cm.

**Adrenal Glands**

The left adrenal gland has a slightly swollen capsule with normal isoechoic parenchyma and no evidence of capsular escape or vascular invasion. Left measures 0.89 cm x 1.96 cm. Phrenic vasculature is normal.

The right adrenal gland is not discretely visualized.

**Spleen**

The spleen measures 1.59 cm at the hilus. It is smooth and homogeneous with several hyperechoic nodular to mass-like lesions within the parenchyma, one of which at the tail mildly distorts the otherwise smooth splenic capsule. The vasculature is normal. No evidence of congestion, spontaneous echo contrast or thrombosis.

**Liver**

The liver is subjectively normal liver size, contour, and structure. Parenchymal echogenicity is naturally coarse and hypoechoic to the spleen. Vasculature is within normal limits with no evidence of congestion. The gallbladder has thin walls which contain anechoic bile. There is no evidence of intra- or extra-hepatic biliary dilation. The cystic and common bile ducts were normal. No hepatic lymphadenopathy is documented. There is no overt structural evidence of inflammatory, infiltrative or regenerative pathology evident.

**Gastrointestinal**

The stomach is mildly distended with echogenic contents and fluid and a mild amount of soft shadowing material mixed within. The pylorus and pyloroduodenal junction are not visualized but there is no overt indication of pyloric outflow obstruction noted. There is no significant small intestinal dilation. The gastrointestinal walls measure within normal limits for thickness with maintenance of normal wall



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layering. There is a mild degree of small intestinal echogenic contents with adequate peristaltic activity. The ileoceocolic junction is patent. The colon contains normal shadowing feces.

## Pancreas

The pancreas is mildly to moderately hypoechoic and prominent with irregular margins and mixed hyper- and hypoechoic nodular changes. There is mild regional hyperechoic mesentery or omental fat consistent with steatitis. No significant lymphadenopathy or free fluid noted.

## ULTRASONOGRAPHIC FINDINGS

- The hyperechoic splenic nodules are most consistent with myelolipomas. However, infiltrative neoplastic disease can't be definitively excluded.
- The kidneys are relatively normal in size and structure, and cortex:medulla ratio (cortex 1/3 of medulla) is essentially maintained. There is age-related loss of the normal smooth capsular contour and C/M junction definition. The cortices are largely uniform in texture with mild hyperechogenicity expected for this patient's age. There is no evidence of pelvic dilation present.
- The stomach is mildly distended with echogenic ingesta and soft shadowing material. The pylorus is not distinctly visualized but there is no overt indication of pyloric outflow obstruction at this time. No significant small intestinal dilation. No evidence of a small intestinal mechanical obstruction at this time.
- The prominent, hypoechoic pancreas with an irregular contour and mixed ill-defined hyper and hypoechoic changes is most consistent with pancreatic remodeling and nodular hyperplasia. This may be secondary to active or acute-on chronic inflammatory disease or pancreatitis.

## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

A urinalysis and urine culture via cystocentesis are recommended to evaluate the urinary tract changes for potential urinary tract infection.

Abdominal radiographs are recommended to better evaluate the pylorus and ensure no evidence of gastric or proximal duodenal foreign material and pyloric outflow obstruction. In the absence of more overt evidence of pyloric outflow obstruction, continued supportive care for suspected pancreatitis is recommended with serial imaging if the patient does not respond clinically.

Fine needle aspirates of the spleen with cytology are recommended. A coagulation profile and platelet estimate prior to sampling are indicated to ensure the absence of coagulopathy. Occasionally some tissues are poorly exfoliative, or cytology is non-specific, in which case biopsy with histopathology may be required for a definitive diagnosis.



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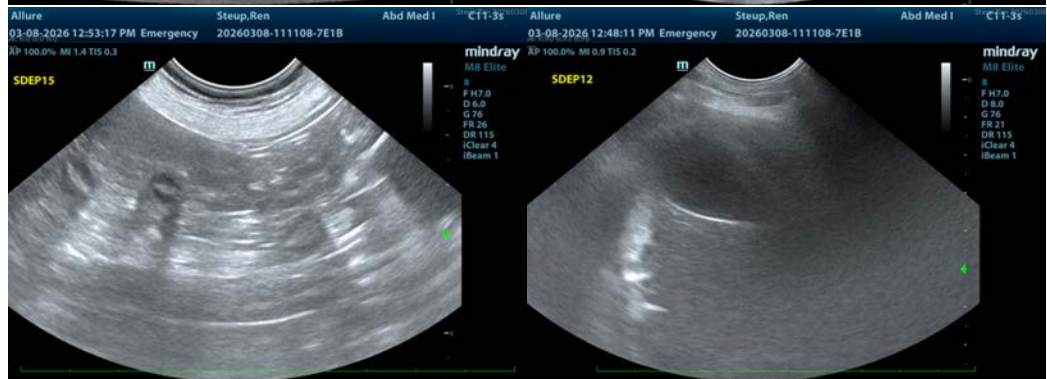
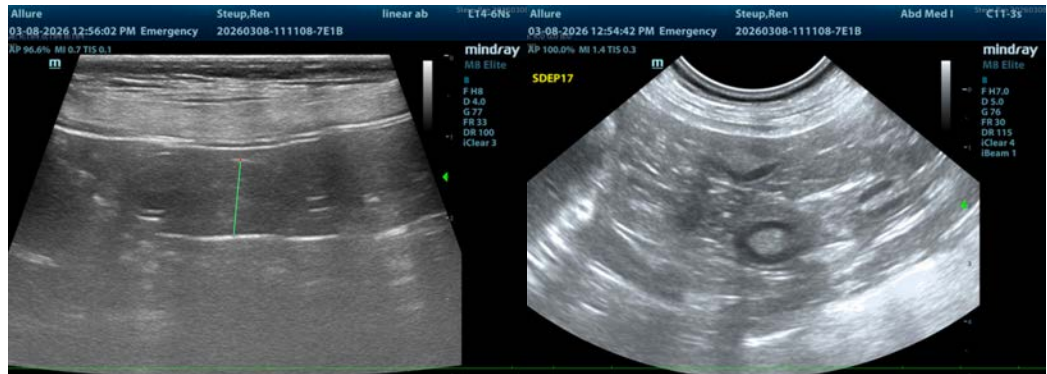
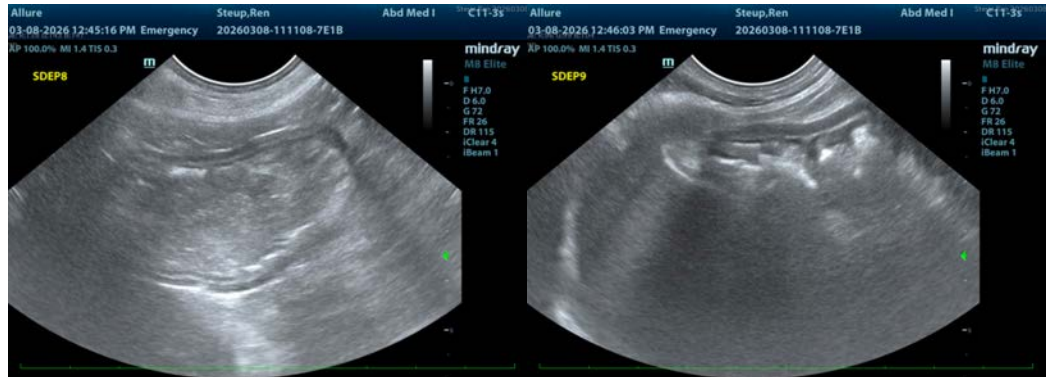
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

**Brad Harris, DVM, DACVECC, DACVIM (cardiology)**

[info@SonoPath.com](mailto:info@SonoPath.com)