



**PATIENT**

Misty Yarmuth

**PRESENTING CLINICAL SIGNS**

History: Weight loss, URI (on Doxycycline).

**SPECIES**

Feline

Hematocrit 27%, non-regenerative anemia. Potassium 3.1. USG 1.028, 2+ proteinuria, inactive sediment, T4 2.1.

**BREED**

Domestic shorthair

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

*Urinary System*

**SEX**

Female, spayed

The urinary bladder wall is normal in thickness and the mucosal surface is smooth. The bladder lumen is moderately distended with mostly anechoic urine. No masses, inflammatory changes or calculi are observed. Ureteral papillae and visualized portion of the proximal urethra, visible to a depth of 1-2 cm, are normal.

**AGE**

12 yrs.

The left kidney is normal size (3.80 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal to mild loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter.

**WEIGHT**

6.41 lbs.

The right kidney is normal size (4.06 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with normal corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

*Adrenal Glands*

**INTERPRETED BY**

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

The left adrenal gland is normal in size (0.36 cm width). Normal shape and glandular echogenicity. The phrenicoabdominal vein and surrounding vasculature are normal.

The right adrenal gland is normal in size (0.34 cm width). Normal shape and glandular echogenicity. The phrenicoabdominal vein and surrounding vasculature are normal.

**IMAGING PERFORMED BY**

Amy Mayhew

*Spleen*

The spleen is subjectively normal in size (0.65 cm in width at the level of the hilus). A 0.55 cm isoechoic nodule is observed at the cranial medial aspect. The lesion causes slight capsular expansion. In the remainder of the spleen, the margins are curvilinear and the parenchyma is homogeneous. Splenic vasculature appears normal with no evidence of thrombosis.

**HOSPITAL NAME**

SVS Imaging Michigan

*Liver*

The liver is subjectively normal in size with normal curvilinear peripheral contours. The parenchyma is hypoechoic relative to the spleen. A 1.4 cm hyperechoic multi-septated cystic nodule is observed on the right side. The remaining parenchyma is homogeneous. Vascular and biliary tracts are of normal volume with no evidence of congestion. The gall bladder lumen is moderately distended. The wall is normal in thickness. A 0.25 cm cholelith is observed within the lumen along with a scant amount of mineralized sand. The cystic and common bile ducts are visible/tortuous. The common bile duct is borderline dilated (up to 0.32 cm). There is a questionable choledocolith within the common bile duct measuring 0.48 cm, although this lesion is only seen in one video clip. The duodenal papilla is normal in size (0.30 cm in width).

**REFERRING VET**

Pinecrest AH

**INVOICE**

14181

*Gastrointestinal*

**DATE**

11/7/22



**PATIENT**

Misty Yarmuth

The gastric lumen is mildly to moderately distended with ingesta. The gastric wall and pylorus are normal in thickness with a normal layering pattern. The pyloric outflow tract is patent. The small intestinal lumen is segmentally dilated with chyme. The small intestinal wall is normal to mildly thickened (up to 0.28 cm) with a normal layering pattern and appropriate mural detail. Discreet masses are not identified. The ileocecolic junction and colonic wall are normal. No obstructive disease is noted.

**SPECIES**

Feline

**Pancreas**

**BREED**

Domestic shorthair

The base and limbs of the pancreas is visible with normal curvilinear peripheral contours. The parenchyma is largely isoechoic relative to surrounding omental fat and slightly mottled in appearance. The pancreatic duct is borderline dilated (0.25 cm in diameter). There is no evidence of peripancreatic inflammation or effusion.

**SEX**

Female, spayed

**Free Abdomen**

**AGE**

12 yrs.

The peritoneal cavity is normal. There is no evidence of inflammation or effusion. A few prominent lymph nodes are observed adjacent to the ileocecolic junction, the largest measuring 0.75 cm in length. The nodes are normal in shape and echogenicity. Surrounding mesentery is slightly hyperechoic.

**WEIGHT**

6.41 lbs.

**ULTRASONOGRAPHIC FINDINGS**

**Primary Findings:**

- The mild small intestinal wall thickening may be a normal variant for this patient or could be consistent with an inflammatory process (i.e., inflammatory bowel disease). Emerging neoplasia is possible but considered less likely.
- If the patient was fasted for this study, the presence of ingesta within the gastric lumen could suggest delayed gastric emptying.
- The pancreatic changes are most consistent with chronic pancreatitis with suspected age-related remodeling.
- Trace ascites. This may be secondary to increased vascular permeability (i.e., vasculitis), increased hydrostatic pressure or low oncotic pressure (less likely).

**Secondary Findings:**

- The lymph node changes are most consistent with reactive lymphadenitis or lymphoid hyperplasia.
- The splenic nodule could be consistent with a benign process (i.e., focus of lymphoid hyperplasia, extramedullary hematopoiesis, granuloma). Alternatively, an emerging tumor is possible.
- The cystic hepatic mass is most consistent with a biliary cystadenoma with a lower possibility of cystadenocarcinoma.
- Cholelith- incidental. Questionable choledocolith (only seen in one video clip).
- Minor bilateral, age-related renal changes.

**INTERPRETED BY**

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(*Small Animal Internal  
Medicine*)

**IMAGING  
PERFORMED BY**

Amy Mayhew

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\*An obvious cause for the patient's weight loss is not definitively identified in this study. Considerations include chronic pancreatitis, microscopic gastrointestinal disease (i.e., inflammatory bowel disease, food allergy, infectious/parasitic disease), underlying metabolic issue, occult neoplasia, other.

## SPECIES

Feline

## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

## BREED

Domestic shorthair

## SEX

Female, spayed

## AGE

12 yrs.

## WEIGHT

6.41 lbs.

- Three-view thoracic radiographs are recommended to assess for occult neoplasia in the chest.
- Also consider a fecal evaluation for ova and Giardia as well as a malabsorption panel including serum cobalamin, folate, TLI and PLI (send to Texas A&M).
- A neurologic examination is also recommended, as weight loss is sometimes the sole clinical sign associated with primary brain tumors.
- Given the anemia, feline leukemia and FIV testing is recommended.
- Depending on the results of the above diagnostics, endoscopic or surgical gastrointestinal biopsies may be warranted.
- Regarding the splenic nodule, consider a fine needle aspirate (if clotting status is appropriate). If a more conservative approach is desired, consider recheck ultrasound in 4-6 weeks to assess for growth.

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Medicine)



## IMAGING PERFORMED BY

Amy Mayhew

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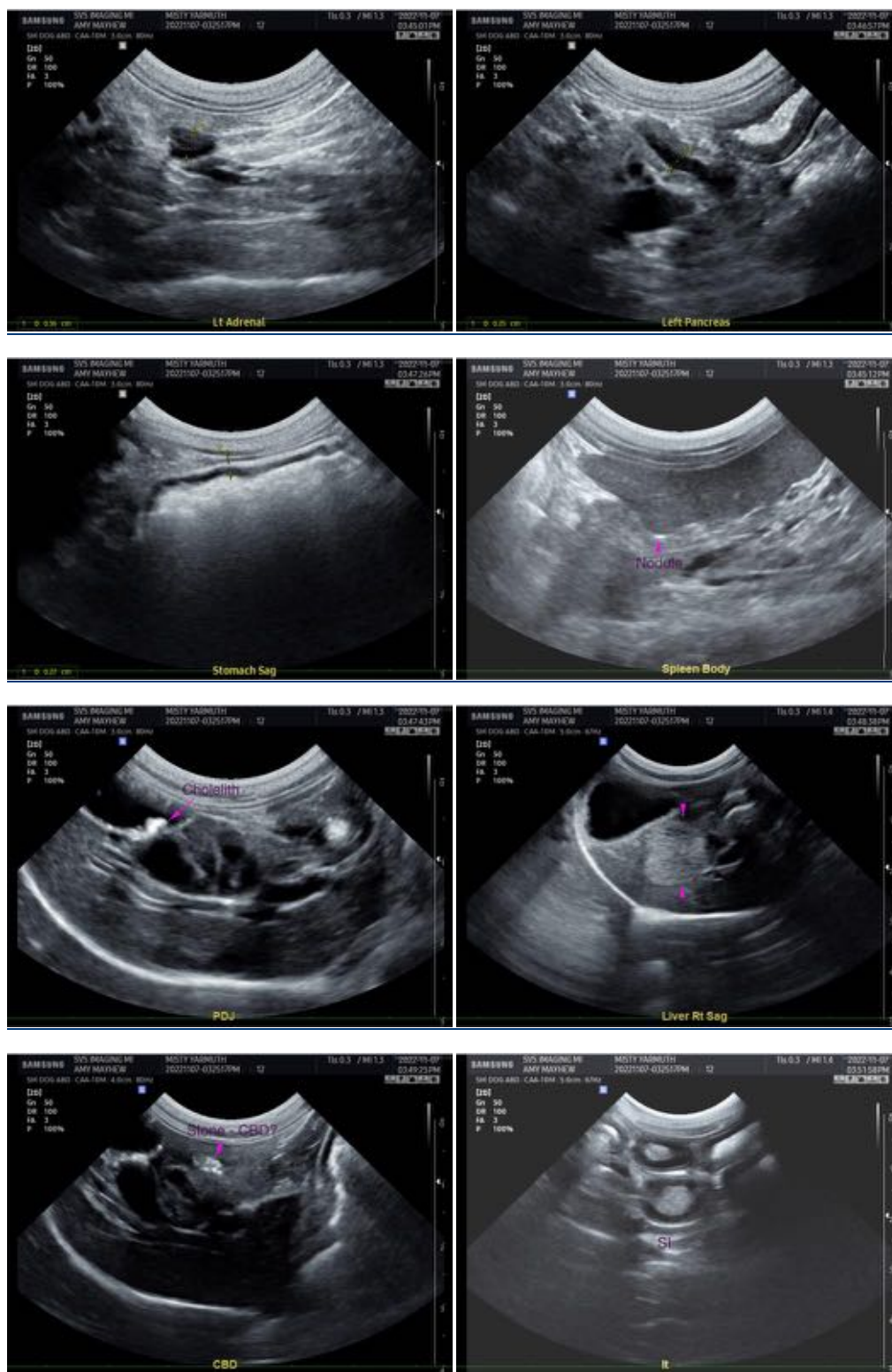
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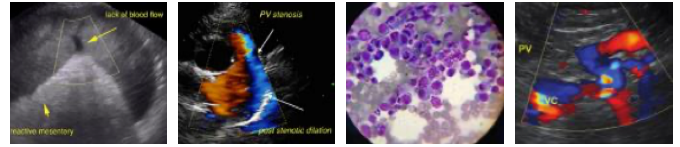
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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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