



PATIENT PRESENTING CLINICAL SIGNS

Skipper Frost

SPECIES

Canine

BREED

Rat Terrier Mix

SEX

Neutered Male

AGE

11 years

WEIGHT

23.8 lbs

INTERPRETED BY

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

IMAGING PERFORMED BY

Saum Hadi

HOSPITAL NAME

Bethany Family PC

REFERRING VET

Saum Hadi

INVOICE

11903

DATE

10.26.22

History: P presents for hyporexia for 5-6 days duration and vomiting of 1 day duration. P somewhat lethargic. P has a history of pancreatitis. Last lab work (chem 27, CBC, cPL) was in July 2021 and revealed a mild ALT increase (188 U/L), mild GGT increase (16 U/L), a mild hyperlipemia (513 U/L), and a moderate cPL increase (505 ug/L, ref: 0-200). P has gained weight in the last year since this lab work was performed (23.8 -> ~25 lbs). Started treating P supportively for presumed pancreatitis today. Abnormal PE/Chem/CBC/UA Results: CBC, Chem 27, UA, TT4 pending.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The **urinary bladder** is mildly to moderately distended. At the caudodorsal aspect, a 0.93 x 0.46 cm echogenic to hyperechoic nodule is visualized. The remaining bladder wall is normal in thickness with a smooth mucosal surface. A small amount of suspended, echogenic debris is observed within the lumen. The region of the trigone is normal.

The region of the **prostate** is not visualized due to its pelvic location.

The **left kidney** is subjectively normal size with a normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with mild loss of corticomedullary distinction. Hyperechoic shadowing diverticular foci are visualized. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter.

The **right kidney** is normal size (5.13 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with mild loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

Adrenal Glands

The **left adrenal gland** is normal size (0.51 cm at cranial pole) (0.50 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.

The **right adrenal gland** is normal size (0.90 cm at cranial pole) (0.60 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

The **spleen** is normal in size (1.40 cm in width at the level of the hilus) with a normal capsular contour. There is appropriate echogenicity and echotexture. A few, ill-defined myelolipomas are observed in the region of the hilus. Splenic vasculature is normal.

Liver

The **liver** is subjectively prominent in size with normal curvilinear peripheral contours. The parenchyma is hyperechoic relative to the spleen and diffusely homogeneous in appearance. No distinct focal lesions are observed. Vascular and biliary tracts are of normal volume with no evidence of congestion.

The **gall bladder** is distended. The wall is normal in thickness. A moderate to large amount of aggregated, echogenic, suspended sludge, in a partially stellate pattern, is observed within the lumen. The cystic and common bile ducts are normal/not seen.



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Gastrointestinal

The **gastric lumen** is mildly to 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. There is no evidence of an obstructive pattern.

Pancreas

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.

Free Abdomen

There is no evidence of free fluid. A 0.66 cm **lymph node** is observed at the aortic trifurcation.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- The gall bladder changes are consistent with an emerging mucocele.
- Suspected benign diffuse hepatopathy. Vacuolar hepatopathy is the top differential. However, correlation with the patient's liver values is recommended.
- The caudodorsal nodule in the urinary bladder wall could be consistent with a benign inflammatory process (i.e., polyp), granuloma, or an emerging tumor (i.e., transitional cell carcinoma).

Secondary Findings

- Bilateral, chronic age-related renal changes
- The prominent lymph node at the aortic trifurcation is likely reactive.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Given the gall bladder changes, initiation of Ursodiol therapy is recommended. Also consider broad-spectrum antibiotics as empirical treatment for secondary bacterial cholecystitis.

A cPLI +/- a full GI panel may also be useful in further evaluating for underlying small intestinal and pancreatic disease as a cause for the patient's clinical signs.

Given the urinary bladder nodule, consider a urine BRAF test to further screen for lower urinary tract neoplasia. It should be noted, however, that a negative result does not completely exclude the possibility of cancer. Therefore, if the clinical suspicion is high and a negative result is obtained, further testing (i.e., biopsy) may be necessary to get a definitive diagnosis.



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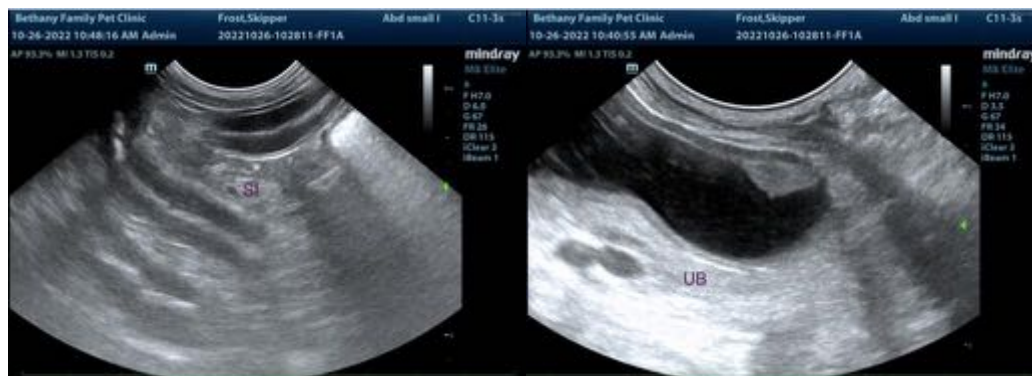
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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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.

Andrea Nicastro, MPH, DVM, Diplomate DACVIM (Small Animal Internal Medicine)
info@SonoPath.com

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