

**DATE PRESENTING CLINICAL SIGNS**

9/26/22

Presented for chronic vomiting. Always had vomiting a couple times a week but now happening daily. O reports weight loss. Also, heart murmur grade 3/6 noted. Lungs otherwise clear.

PATIENT

Nerys Rose

Current Medications: Cerenia 16mg ½ SID x 8 days. Stop for 2 days, then repeat if needed.

Lab Results: HCT 29%, otherwise NSF on labwork including T4.

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Torbugesic/Valium IV.

Stat Report: Not requested.

SPECIES

Feline

Imaging Performed By: Stephanie Warga RDCS, RVT.

BREED

Domestic shorthair

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**Urinary System**

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

SEX

Female, spayed

AGE

4/1/2006

The left kidney is borderline small in size (2.99 cm in length) with a relatively normal shape, smooth peripheral margins and normal internal architecture. There is mild loss of corticomedullary distinction. Several hyperechoic shadowing diverticular foci are observed. A few non-obstructive nephroliths are visualized. There is no evidence of pyelectasia, infarcts or hydroureter. Renal vasculature is normal.

WEIGHT

8.31 lbs.

The right kidney is normal in size (3.30 cm in length) with a normal shape, smooth peripheral margins and normal internal architecture. There is mild loss of corticomedullary distinction. Several hyperechoic shadowing diverticular foci are observed. A few non-obstructive nephroliths are visualized. There is no evidence of pyelectasia, infarcts or hydroureter. Renal vasculature is normal.

INTERPRETED BY

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

Adrenal Glands

The region of the left adrenal gland is evaluated. No obvious pathology is observed.

Right adrenal gland- See *Other*.

HOSPITAL NAME

Everhart VH

Spleen

The spleen is normal in size (0.63 cm in width at the level of the hilus) with a normal capsular contour. There is appropriate echogenicity and echotexture. No focal lesions are observed. Splenic vasculature is normal.

REFERRING VET

Dr. Betta

Liver

The liver is subjectively enlarged with irregular peripheral contours. On the left side, a 3.91 x 3.40 cm heterogeneous multi-septated cystic mass is observed. The lesion causes capsular expansion. On the right side, a >5 cm ill-defined cystic area is also seen. Vascular and biliary tracts are of normal volume with no evidence of congestion. The gall bladder lumen is mildly to moderately distended. The wall is normal in thickness. A small amount of mostly partially dependent echogenic debris is observed within the lumen. The cystic and common bile ducts are visible/tortuous but not overtly dilated. The duodenal papilla is normal (0.44 cm in width).

INVOICE

14020

Gastrointestinal

The stomach and intestine are free of stasis and exhibit normal peristaltic activity. The gastric lumen is mildly fluid distended. 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 not dilated. The small intestinal wall is diffusely

thickened (up to 0.52 cm) with apparent retention of the normal layering pattern. There is disruption in the normal 1:3 muscularis: mucosal ratio with a >1:1 ratio in most segments. Discreet masses are not identified. The colonic wall is normal. No obstructive disease is noted.

Pancreas

The pancreas is normal in size with normal peripheral contours. The pancreatic duct is normal. The base and limbs of the pancreas are isoechoic to surrounding omental fat. No focal lesions are observed. There is no evidence of peripancreatic inflammation or effusion.

Free Abdomen

Trace free fluid is observed. A few prominent mesenteric lymph nodes are visualized, the largest measuring 0.90 cm in length. Surrounding mesentery is slightly hyperechoic.

Other

A 1.71 x 1.43 cm hypoechoic nodule/mass is observed in the right cranial quadrant, in the region of the right adrenal gland. There is a suspected linear appendage extending from the cranial portion of the mass into the caudal vena cava. The tip of the appendage appears mineralized.

ULTRASONOGRAPHIC FINDINGS

Primary Findings:

- The bowel pattern could be consistent with severe inflammatory bowel disease or emerging lymphoma.
- The prominent abdominal lymph nodes are most consistent with reactive lymphadenitis or lymphoid hyperplasia. Neoplastic infiltration is also a consideration.
- The cystic hepatic masses/lesions could be consistent with biliary cystadenoma or cystadenocarcinoma.
- Trace ascites is present, likely secondary to bowel and/or hepatic pathology.
- The origin of the mass in the right cranial quadrant is unclear but may be arising from right adrenal gland, mesentery, lymph node, other. Right adrenal origin is favored. There appears to be extension into the caudal vena cava. Neoplasia is suspected with a lower possibility of an inflammatory focus or granuloma.

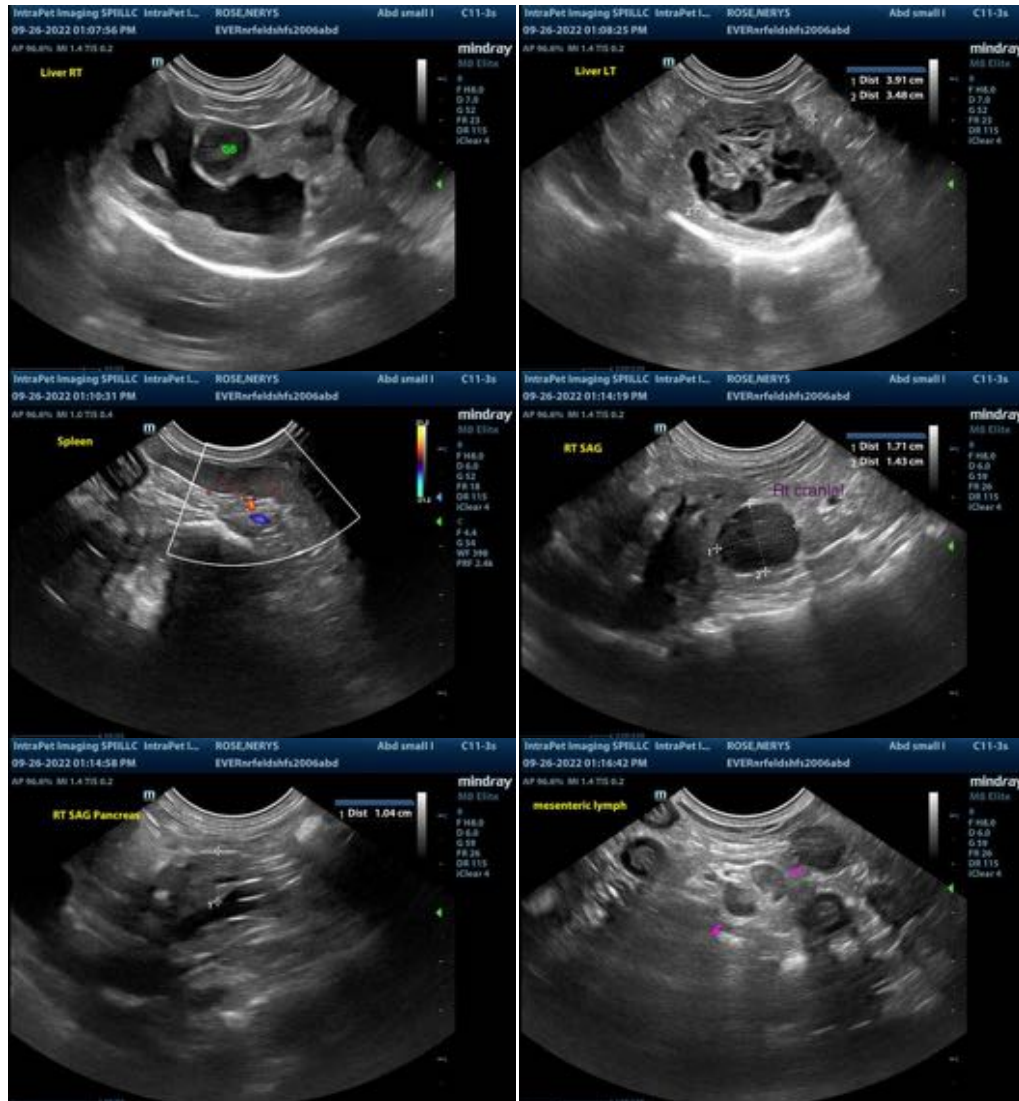
Secondary Findings:

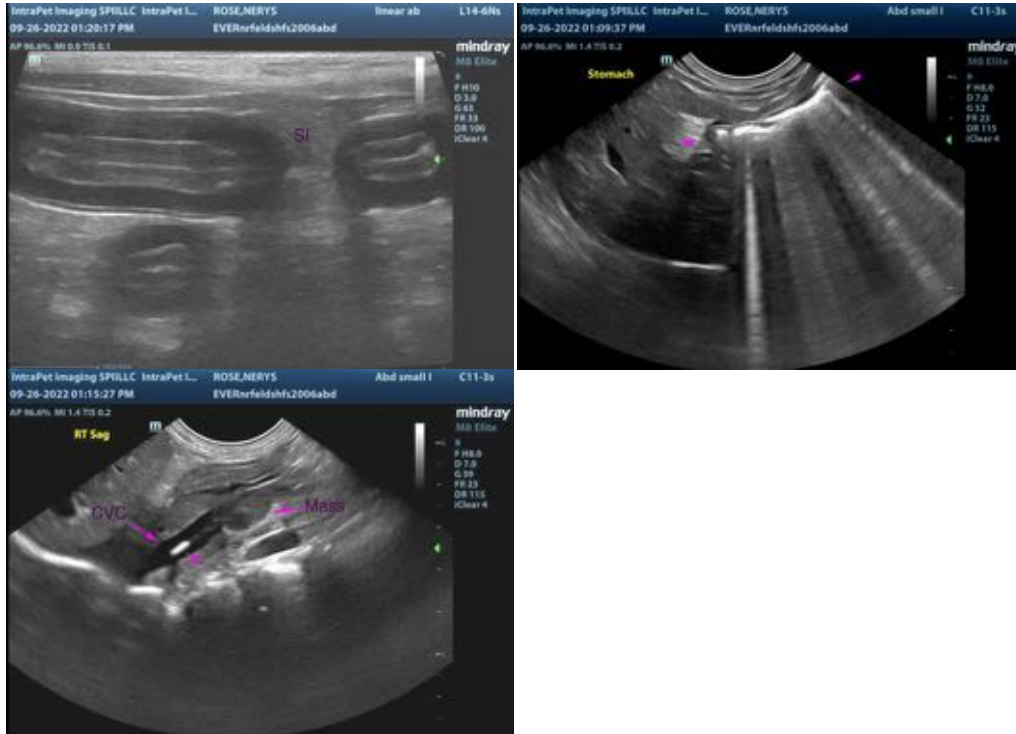
- Bilateral, degenerative renal changes with non-obstructive nephrolithiasis.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- Three-view thoracic radiographs are recommended to assess for pulmonary metastases.
- Given the mass in the region of the right adrenal gland, consider a baseline blood pressure measurement and aldosterone:renin ratio (to assess for primary hyperaldosteronism) or just an aldosterone level, if a renin assay is not available.

- Given the bowel changes, a malabsorption panel including serum cobalamin, folate, TLI and PLI is recommended along with a fecal evaluation for ova and Giardia. Ultimately, GI and abdominal lymph node biopsies would be necessary to get a definitive diagnosis. If surgical biopsies are pursued, the hepatic lesions could also be biopsied concurrently +/- removal of the mass in the right cranial quadrant. An abdominal CT scan would be useful in pre-surgical planning.





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.

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