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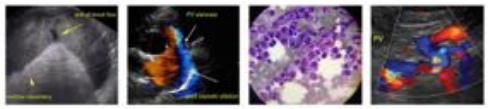

SonoPath
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**PATIENT**

Roxie Smith

**SPECIES**

Canine

**BREED**

Boxer

**SEX**

Female Spayed

**AGE**

10 years

**WEIGHT**

69.2 lbs

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Pamela Harrigan, RDCS

**HOSPITAL NAME**

Norfolk County VS

**REFERRING VET**

Christina Poor, BVetMed

**INVOICE**

12703

**DATE**

4.6.23

## PRESENTING CLINICAL SIGNS

History: Chronic blood noted in stool, weight loss; appetite is decreased as well. Having fasted GI panel today. On Metronidazole 250 mg BID, Fortiflora daily.

Abnormal PE/Chem/CBC/UA Results: ALK phos, 320 PSL elevated 200.

## ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

### *Urinary System*

The urinary bladder wall is normal in thickness and the mucosal surface is smooth. The bladder is moderately distended. Luminal contents are anechoic. No cystic calculi are observed. The region of the trigone and the proximal urethra, visible to a depth of 2 cm, are normal.

The left kidney is normal in size (6.58 cm in length) with a normal shape, architecture and smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with mild to moderate loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter.

The right kidney is normal in size (6.57 cm in length) with a normal shape, architecture and smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with mild to moderate loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter.

### *Adrenal Glands*

The left adrenal gland is normal in size (0.56 cm at cranial pole) (0.62 cm at caudal pole) with a normal shape and homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature appear normal.

The right adrenal gland is in normal size (0.83 cm at cranial pole) (0.54 cm at caudal pole) with a normal shape and homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature appear normal.

### *Spleen*

The spleen is normal in size (1.73 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 appears normal.

### *Liver*

The liver is subjectively prominent to enlarged, with slightly swollen peripheral contours. The parenchyma is isoechoic relative to the spleen and mildly heterogenous in appearance. A 1.24 cm ill-defined, hypoechoic nodule is observed at the caudal aspect, approximately mid-liver. Hepatic vasculature and intrahepatic biliary tracts are of normal volume with no evidence of congestion.

The gall bladder lumen is moderately distended. The wall is thin and smooth. A small to moderate amount of mostly gravity-dependent, echogenic debris/sludge is observed within the lumen. The cystic and common bile ducts are normal/not seen.

### *Gastrointestinal*

The gastric lumen is not 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 normal in thickness with a normal layering pattern and appropriate mural detail. The proximal colonic wall is normal in thickness. A several-centimeter segment of distal colonic wall is thickened (up to 0.83 cm) with a loss of the normal layering pattern. The lumen in this region contains shadowing fecal material. The mesentery effacing the serosal surface is hyperechoic in this segment.

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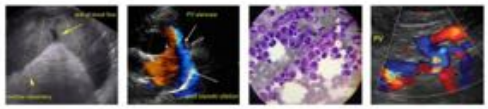

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***Pancreas***

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 questionable trace ascites. Two medial iliac lymph nodes are visualized (the largest measuring 1.99 cm in length). In addition, one-two prominent sublumbar lymph nodes are seen (the largest measuring 1.29 cm in length). A 2.04 cm mesenteric lymph node is also obstruction.

## ULTRASONOGRAPHIC FINDINGS

### Primary Findings

- The distal colonic wall changes could be consistent with infiltrative neoplasia (i.e., adenocarcinoma, lymphoma). Alternatively, granulomatous colitis (histiocytic ulcerative colitis) is possible, particularly given the patient's breed. Adjacent peritonitis is present.
- The abdominal lymphadenopathy could be consistent with reactive lymphadenopathy, lymphoid hyperplasia or infiltrative neoplasia.

### Secondary Findings

- The diffuse hepatic changes are non-specific and could be consistent with vacuolar hepatopathy, regenerative nodular hyperplasia, and/or age-related remodeling. Inflammatory and infiltrative disease are considered less likely.
- Bilateral chronic age-related renal changes

## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- Three-view thoracic radiographs are recommended to assess for pulmonary metastases.
- If accessible, fine-needle aspiration of the thickened colonic wall should be considered (if clotting status is appropriate). A 25-gauge needle should be used and care should be taken to avoid penetration of the colonic lumen during the procedure. If the cytology results are inconclusive or if the region is inaccessible for aspiration, endoscopic or surgical biopsies can be considered. If biopsies are pursued, fluorescence in situ hybridization (FISH) testing on the tissue samples is recommended to assess for invasive E. coli (which is seen with granulomatous colitis). If tissue sampling is not pursued, consider empirical treatment for granulomatous colitis/histiocytic ulcerative colitis with enrfloxacin. If no response is seen within 2 weeks of initiating therapy, antibiotics should be discontinued. If the patient responds to treatment, therapy should be continued for at least 8 weeks with a recheck ultrasound at the end of that time period to reassess the colon.

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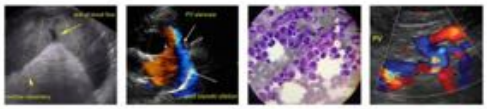

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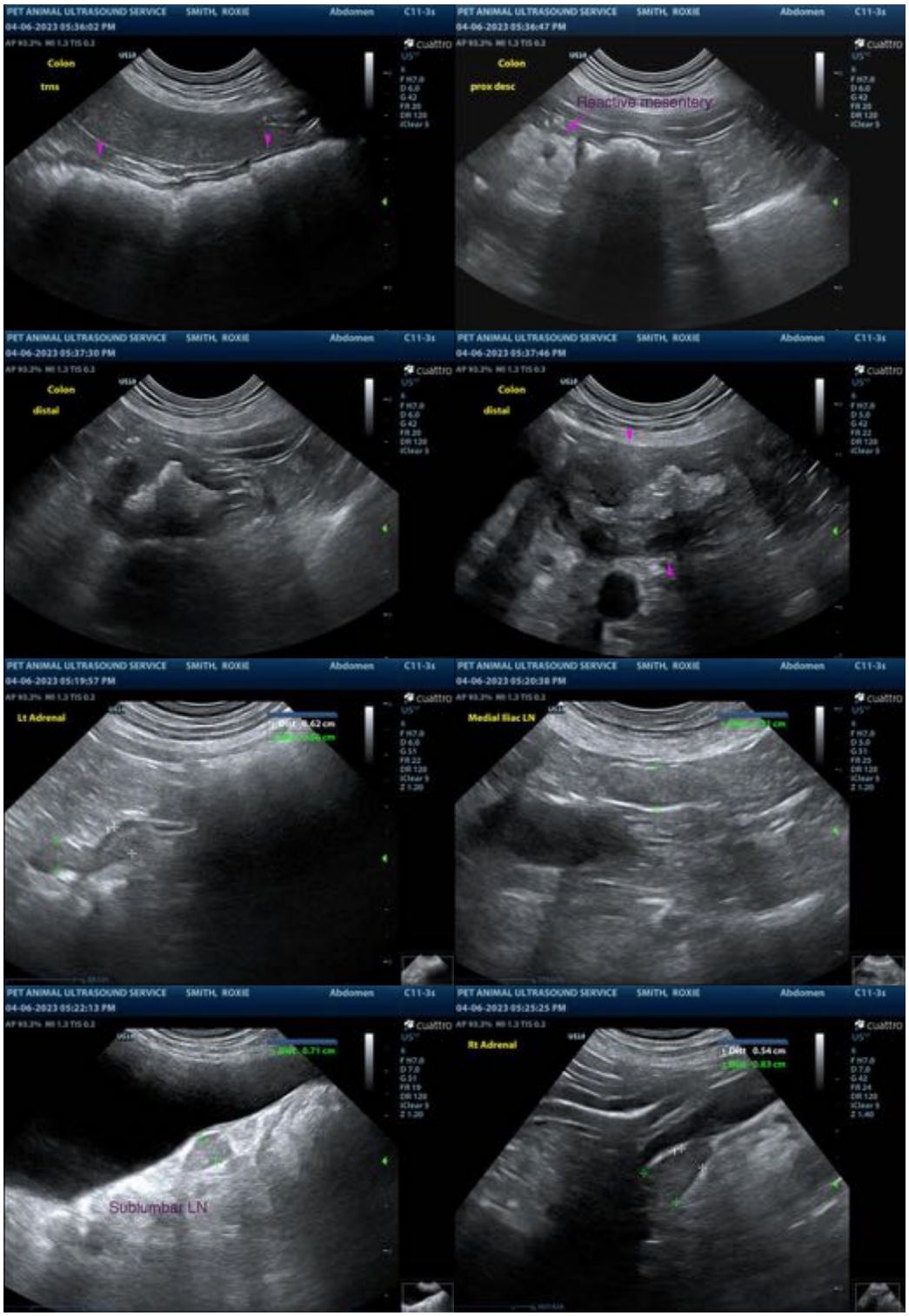

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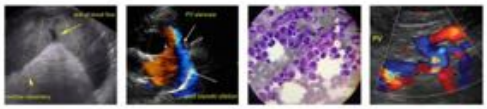

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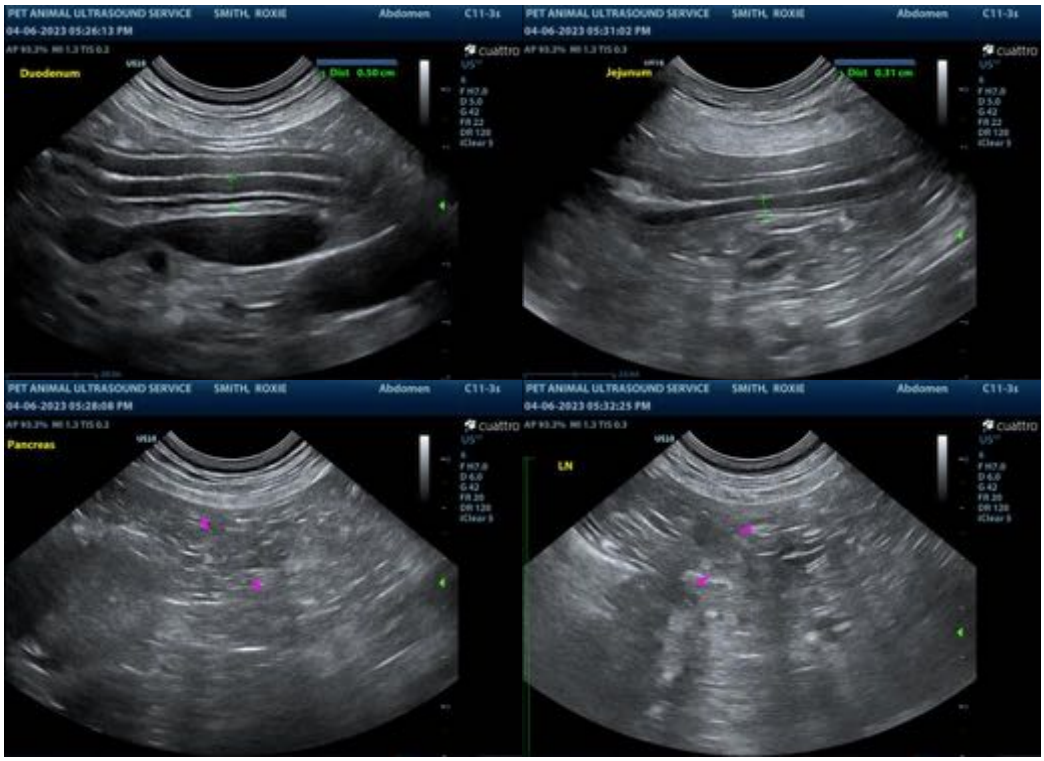


**The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.**

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.

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