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Clinical Sonography & Telecytology
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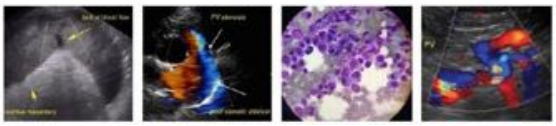


THE FOCAL ZONE
IMAGING PERFORMED BY
289-808-2608 info@thefocalzone.com

PATIENT

Sassy Lott

SPECIES

Canine

BREED

Yorkshire Terrier

SEX

Spayed Female

AGE

5 years

WEIGHT

3 kg

INTERPRETED BY

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

IMAGING PERFORMED BY

Kelly Reschny

HOSPITAL NAME

Snelgrove VS

REFERRING VET

Dr. McQueen

INVOICE

11258

DATE

7.22.22

PRESENTING CLINICAL SIGNS

History: vomiting in the mornings and on and off diarrhea meds: sulcrate
Abnormal PE/Chem/CBC/UA Results: Elevated SDMA Decreased albumin and TP Bile Acids - preprandial elevated and post is normal UPCR 0.3 slightly elevated

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. The region of the trigone and the visible portion of the proximal urethra are normal.

The **left kidney** is normal size (3.27 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.

The **right kidney** is normal size (3.20 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

The **left adrenal gland** is normal size (0.48 cm at cranial pole) (0.42 cm at caudal pole) (1.18 cm in length); 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 (1.06 cm at cranial pole) (0.42 cm at caudal pole) (1.32 cm in length); 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 (0.97 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.

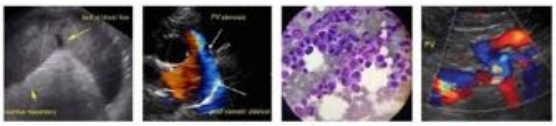
Liver

The **liver** is normal to slightly prominent in size with normal curvilinear peripheral contours. There is appropriate echogenicity and echotexture. No overt structural evidence of inflammatory, infiltrative, or regenerative pathology is evident. Vascular and biliary tracts are of normal volume with no evidence of congestion. No pathological hepatic lymphadenopathy observed.

The **gall bladder** is mildly distended. The wall is thickened (up to 0.21 cm) with a “double-walled” effect. Luminal contents are mostly anechoic. The cystic and common bile ducts are normal.

Gastrointestinal

The **gastric lumen** is minimally distended with ingesta. The gastric wall and pylorus are normal in thickness with a normal layering pattern. The small intestinal lumen is segmentally dilated with chyme. The small intestinal wall is diffusely thickened (up to 0.44 cm) with apparent retention of the normal layering pattern. There is evidence of mucosal speckling, fogging and occasional striations. Discreet masses are not identified. The colonic wall is normal. There is no evidence of an obstructive pattern.



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Pancreas
Portions of the pancreas may be obscured by the free fluid and reactive mesentery. In the visualized portions, no obvious abnormalities are seen.

Free Abdomen
The mesentery throughout the abdomen is hyperechoic. A small to moderate amount of anechoic free fluid is observed. The abdominal **lymph nodes** are normal/not visible.

Other
Pleural effusion is noted.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- The clinical history in combination with the sonographic changes, are consistent with a protein-losing enteropathy. Top differentials include lymphangiectasia, inflammatory bowel disease, infectious/parasitic disease and infiltrative neoplasia (i.e., lymphoma). Diffuse peritonitis is present, likely secondary to bowel pathology and/or chronic ascites.
- The pleural effusion may be secondary to hypoalbuminemia. However increased hydrostatic pressure (i.e., due to congestive heart failure) or increased vascular permeability cannot be excluded.

Secondary Findings

- The gall bladder wall changes may be secondary to hypoalbuminemia, cholecystitis, artifact (i.e., due to lack of full repletion), anaphylaxis (less likely), other.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Concerning the sonographic changes, consider the following:

1. Fecal evaluation for ova and Giardia
2. Prophylactic deworming with fenbendazole
3. GI panel including serum cobalamin and folate, TLI and PLI (send to Texas A&M)
4. Low-dose fat limited antigen diet trial (consider nutritional consultation (i.e., University of (send to the University of TN)).

Ultimately, GI biopsies may be warranted. Surgical biopsies are more likely to yield a definitive diagnosis. If surgical biopsies are pursued, consider a liver biopsy to rule out concurrent hepatic disease.

Thoracic radiographs are also recommended to assess the degree of pleural effusion.

A resting cortisol level can also be considered to screen for hypoadrenocorticism. However, this differential is considered less likely in light of the sonographic bowel changes.

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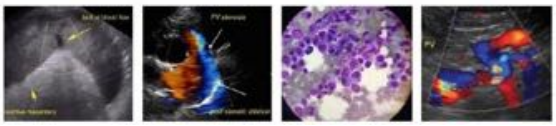

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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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