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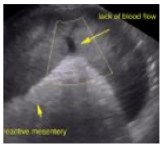
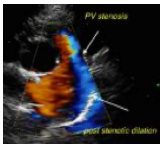
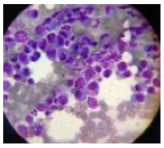
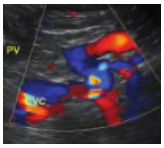
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™

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PATIENT
Grits Taylor

SPECIES
Canine

BREED
Labrador

SEX
Spayed Female

AGE
13 years

WEIGHT
64 lbs

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

IMAGING PERFORMED BY
Dr. Van Nieuwal

HOSPITAL NAME
Animal EH Volusia

REFERRING VET
Dr. Van Nieuwal

INVOICE
11648

DATE
9.16.22

PRESENTING CLINICAL SIGNS

History: Vomiting, pacing, uncomfortable. Saw rDVM yesterday for panting heavily - chest rads and TFAST NSF. BW showed UTI and creat of 2 (chronic issue per rDVM). This morning p ate breakfast, later in the day vomited and pacing/uncomfortable with no interest in treats this afternoon which is very unlike her. Recheck with rDVM rads show gas distension in stomach - rDVM concern p may be trying to bloat. O is wife of retired DVM Dr. Taylor. p also has grade 2/6 murmur today which was not present yesterday per rDVM

Radiograph report: Findings 3 radiographs dated September 15, 2022, are available for review. The stomach contains a mild amount of gas. The small intestines contain tubular gas with homogeneous soft tissue opacity and are uniform in diameter. The colon contains a semi-formed feces. On the VD, there is wispy soft tissue opacity within the right mid and caudal. The right kidney is small with a flattened caudal pole. The left kidney appears normal in size. The liver and spleen are within normal limits. The urinary bladder is minimally distended. The cardiac silhouette, pulmonary vasculature, and pulmonary parenchyma are relatively unremarkable on the lateral projection provided. There is multifocal spondylosis deformans in the imaged spine. Conclusion 1. No evidence of gastric dilatation-volvulus. 2. Possible peritoneal effusion and/or peritonitis. 3. No definitive evidence of a small intestinal mechanical obstruction. 4. Small right kidney with a flattened caudal pole. Consider chronic renal disease with a chronic cortical infarct. 5. Unremarkable lateral thorax. Recommendations An abdominal ultrasound is suggested to further evaluate the GI tract and peritoneal space. Read By: Kimberly Mulligan DVM, Diplomate ACVR 9/15/2022 10:55:15 PM UTC

Abnormal PE/Chem/CBC/UA Results: Albumin 2.6, creat 2.0, AMYL 1131, TP 5.6 UTI present 4DX: negative x4 Fecal: negative

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 is normal.

The **left kidney** is normal size (5.35 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter.

The **right kidney** is normal size (5.29 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter.

Adrenal Glands

The **left adrenal gland** is normal size (0.39 cm at cranial pole) (0.46 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 (0.92 cm at cranial pole) (0.56 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 subjectively normal in size (1.85 cm in width at the level of the hilus) with normal curvilinear peripheral contours. The parenchyma is diffusely mottled, with numerous, small, hypoechoic nodules throughout the organ. Splenic vasculature appears normal with no evidence of thrombosis.

Liver

The **liver** is subjectively normal in size with normal contours and structure. 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 of normal contours and contains some dependent echogenic debris. The wall is normal in thickness. No cholelithsare observed. The cystic and common bile ducts are normal/not seen.

Gastrointestinal

The **gastric lumen** is not distended. The gastric wall is normal in thickness with a normal layering pattern. The small intestinal lumen is segmentally dilated with chyme. The small intestinal wall is normal in thickness with retention of the normal layering pattern. There is slight disruption in the normal 1:3 muscularis: mucosal ratio in some segments. Discreet masses are not identified. The colonic wall is normal. There is no obvious 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

A small amount of anechoic free fluid is present. The abdominal **lymph nodes** are normal/not visible.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- The ascites may be secondary to low oncotic pressure, increased vascular permeability, or increased hydrostatic pressure.
- The splenic changes could be consistent with a benign process (i.e., lymphoid hyperplasia, extramedullary hematopoiesis, splenitis or antigenic stimulation). Alternatively, infiltrative neoplasia (i.e., lymphoma) may be present.
- The segmental small intestinal wall changes are suggestive of inflammatory bowel disease. However, correlation with the patient's clinical history is recommended.

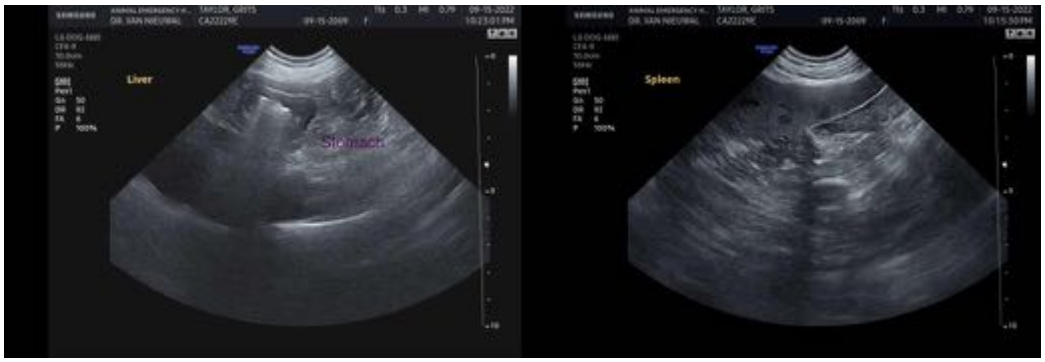
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

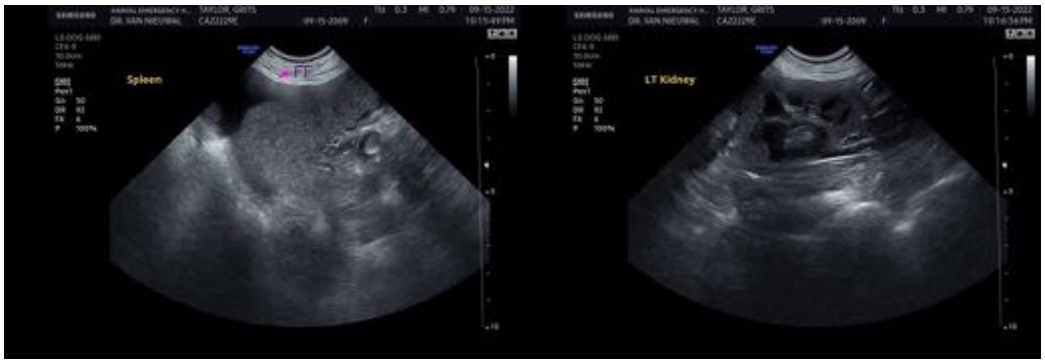
Consider a fine-needle aspirate of the spleen and the free abdominal fluid if clotting status is appropriate. Twenty-five gauge-needles should be used.

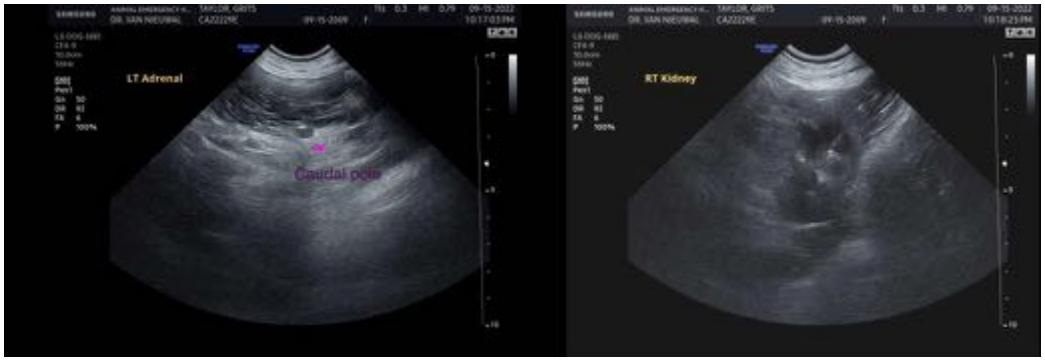
Three-view thoracic radiographs are also recommended to assess cardiopulmonary and esophageal status.

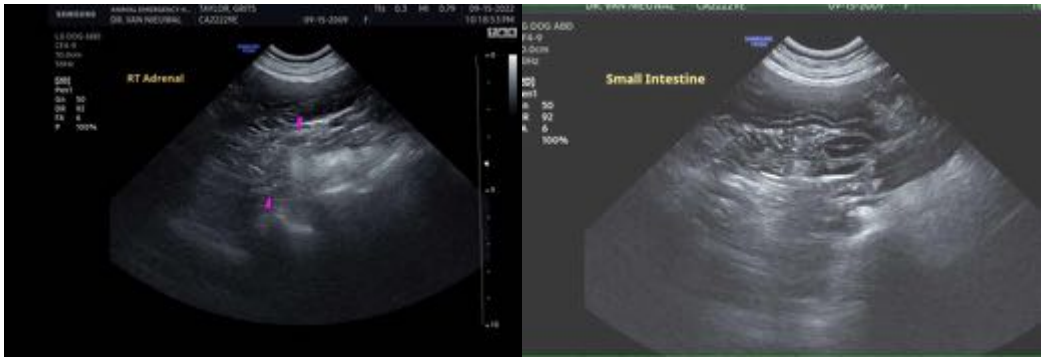
Regarding the hypoalbuminemia, consider the following:

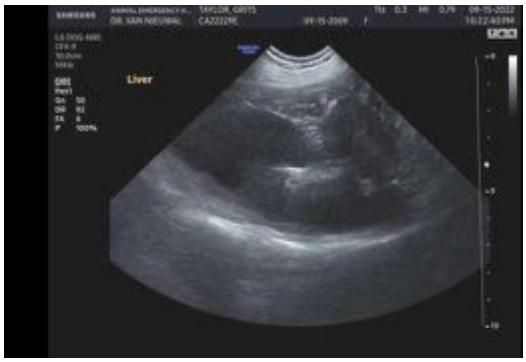
1. UPC to assess for proteinuria. This should be performed when the urinary tract infection has cleared.
2. Pre-and postprandial serum bile acids
3. Resting cortisol level to evaluate for hypoadrenocorticism
4. +/- GI biopsies (if above diagnostics are inconclusive)


Liver
Stomach
Spleen


Spleen
FT
LT Kidney


LT Adrenal
Caudal pole
RT Kidney


RT Adrenal
Small Intestine



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