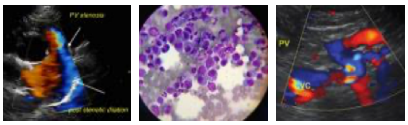
IMAGING PERFORMED BY

IntraPet.com



SonoPath
Clinical Sonography & Telecytology
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DATE

8/16/22

PATIENT

Kallie Schwabe

SPECIES

Canine

BREED

Australian Cattledog

SEX

Female, spayed

AGE

10/11/2007

WEIGHT

39.6 lbs.

INTERPRETED BY

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

HOSPITAL NAME

Fork VH

REFERRING VET

Dr. Doherty

INVOICE

13843

PRESENTING CLINICAL SIGNS

Originally a routine follow-up of the echocardiogram 6 months post. However, the dog has had chronic diarrhea over the past month and it is not resolving with the initial treatment. Last week, the dog was having a persistent bout of diarrhea and straining excessive when she experienced a likely syncopal episode as she collapsed and was down for a few minutes before she responded. Cardiac signs are minimal with no cough or dyspnea noted by the owner over the past few weeks. Cardiac murmur has persisted at a level of a Grade 3-4/6 systolic Dog has a previously diagnosed gall bladder mucocele.

Current Medications: Pimobendan 3.75 mg BID, Enalapril 5.0 mg BID
Ursodiol 250 mg QD, Denamarin 475 mg QD, Proin 75 mg - 1/2 tablet BID, Galliprant 60 mg QD -1/2 tablet PRN, Tylosin 100 mg QD
Lab Results: Results from 5/2/22: WBC 4.1 (4.9-17.6 K/uL) previously results on 1/14/22 - 5.25 K/uL, Neutrophils 2.341 (2.94-12.67 K/uL)
BUN 45 (9-31 mg/dl) previously on 1/14/22 - 41 mg/dl, Albumin 4.2 (207-3.9 g/dl) previously 1/14/22 - 4.3 g/dl, ALT 258 (18-121 U/L) previously 1/14/22 - 138 U/L
Date of Previous IntraPet Ultrasound: 6/2021 & 7/2020.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Declined at this time.
Imaging Performed By: Stephanie Warga RDCS, RVT.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder is mildly distended with mostly anechoic urine. The wall in the region of the apex is thickened (up to 0.43 cm) with a slightly irregular mucosal surface. The wall tapers to a normal thickness as it extends toward the cystourethral junction. 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 size (6.55 cm in length); normal shape and architecture with smooth peripheral margins. The cortex is mildly thickened and hyperechoic and there is poor corticomedullary distinction. 1-2 small cortical cysts are seen. Trace pyelectasia is present. There is no evidence of nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The right kidney is normal size (5.86 cm in length); normal shape and architecture with smooth peripheral margins. The cortex is mildly thickened and hyperechoic and there is poor corticomedullary distinction. A few small cortical cysts are seen. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

Adrenal Glands

The left adrenal gland is enlarged (3.03 cm at cranial pole) (1.20 cm at caudal pole) (1.94 cm in length) with an irregular shape. The parenchyma is heterogeneous with loss of glandular detail. The phrenicoabdominal vein and surrounding vasculature appear normal.

The right adrenal gland is upper limits of normal size (0.89 cm at cranial pole) (0.68 cm at caudal pole) (2.27 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 (1.49 cm in width at the level of the hilus) with a normal capsular contour. There is appropriate echogenicity and echotexture. A 0.66 cm ill-defined hyperechoic nodule/area is observed at the cranial aspect. Splenic vasculature is normal.

Liver
The liver is subjectively prominent in size with normal curvilinear peripheral contours. The parenchyma is hypoechoic relative to the spleen and exhibits subtle heterogeneity. A 3.41 x 2.06 cm irregular hyperechoic to heterogeneous mildly cavitated nodule/mass is observed on the left side. In addition, a 4.2 cm ill-defined heterogeneous area/mass is observed deep on the right side, adjacent to the diaphragm. Neither lesion appears to cause capsular expansion. Vascular and biliary tracts are of normal volume with no evidence of congestion. The gall bladder lumen is distended. The wall is normal in thickness. A large amount of aggregated/organized suspended sludge in a stellate pattern is observed within the lumen. The cystic and common bile ducts are normal/not seen.

Gastrointestinal
The stomach and intestine are free of stasis and exhibit normal peristaltic activity. 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 thickness is normal with a normal layering pattern and appropriate mural detail. Discreet masses are not identified. The colonic wall is normal. No obstructive disease is noted.

Pancreas
The right limb of the pancreas is visible with normal curvilinear peripheral contours. The parenchyma is largely isoechoic relative to surrounding omental fat and slightly mottled in appearance. The pancreatic duct is visible but not overtly dilated. There is no evidence of peripancreatic inflammation or effusion.

Free Abdomen
There is no evidence of free fluid. The abdominal lymph nodes are normal/not visible.

ULTRASONOGRAPHIC FINDINGS
Primary Findings:

- The gallbladder changes are consistent with a fully formed mucocele. The sludge appears more organized (progressive) on today's sonogram.
- The hepatic nodule/masses could be consistent with a benign process (i.e., regenerative nodular hyperplasia). Alternatively, emerging neoplasia is possible. The left lesion is similar in size compared to the previous sonogram. The right lesion is new.

Secondary Findings:

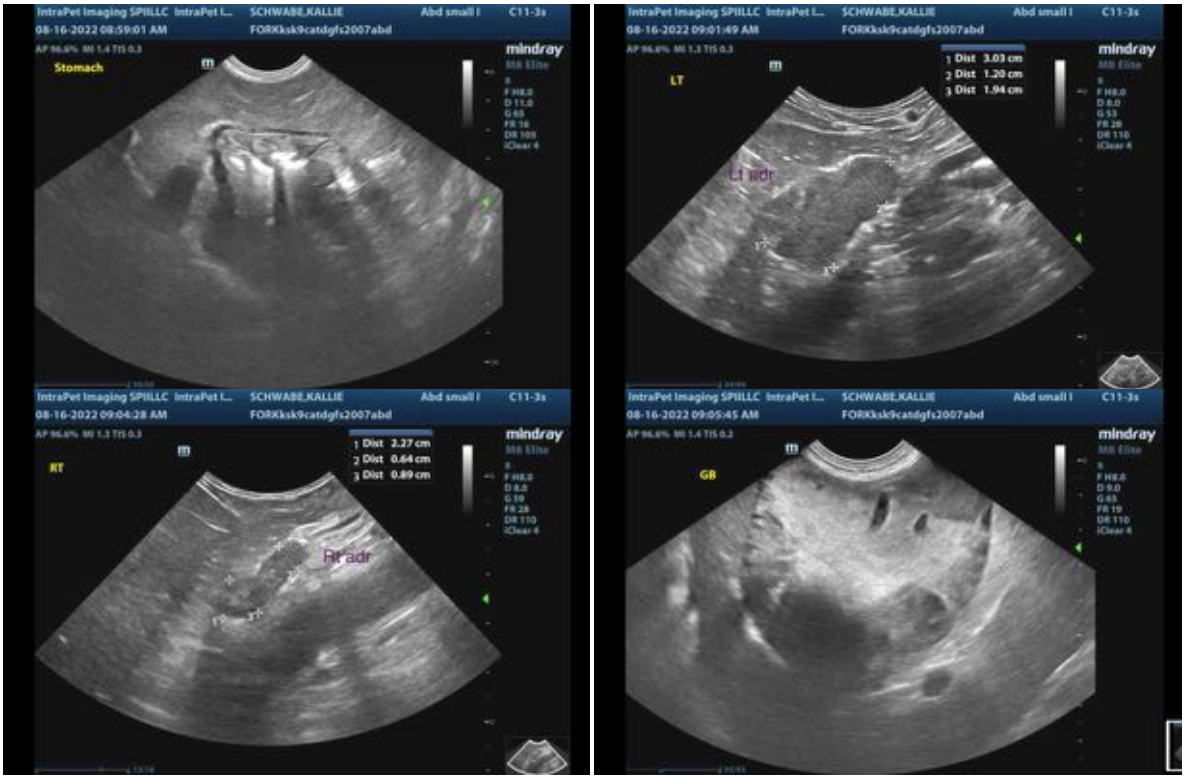
- The bilateral renal changes are most consistent with chronic interstitial nephrosis/nephritis with cortical cysts. Changes are similar to the previous sonogram.
- Bilateral adrenomegaly, more pronounced on the left side. Changes are similar to the previous sonogram.
- The hyperechoic splenic nodule trends toward the benign (i.e., myelolipoma) with a lower possibility of emerging neoplasia.
- The pancreatic changes are most consistent with age-related parenchymal remodeling, potentially secondary to a prior inflammatory episode, early fibrosis or chronic pancreatitis. Changes are similar to the previous sonogram.

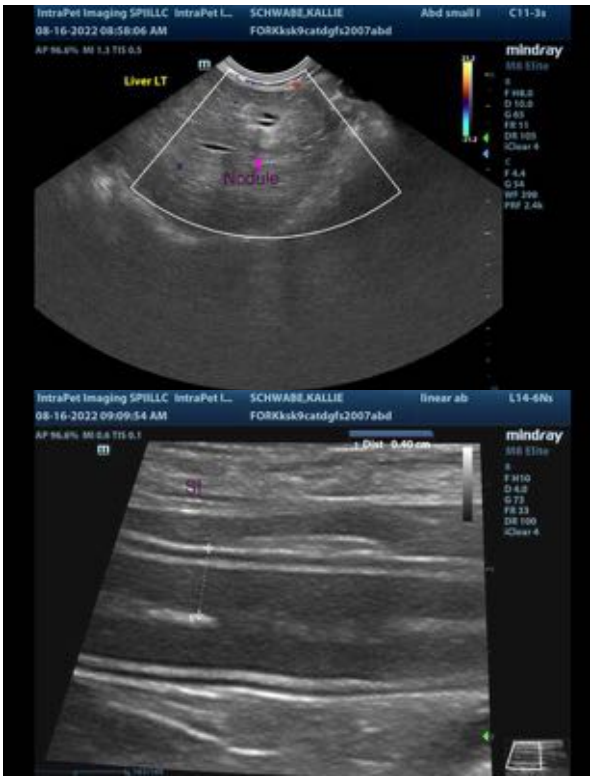
- The urinary bladder wall changes in the region of the apex could be consistent with cystitis or may be artifactual due to lack of full repletion. Correlation with the patient's clinical history and urinalysis findings is recommended.

*An obvious cause for the patient's diarrhea is not identified in this study. Occasionally, dogs with gallbladder mucoceles can develop intermittent GI signs. Alternatively, another disease process (i.e., primary gastrointestinal disease, mild pancreatitis, underlying metabolic issue) might be present.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- Fecal evaluation for ova and Giardia, if not already performed.
- Prophylactic deworming with Fenbendazole at 50 mg/kg once a day for 5 days is recommended. Repeat above protocol in 3 weeks.
- Malabsorption panel including serum cobalamin, folate, TLI and PLI.
- Consider a low fat or novel protein diet trial along with initiation of a probiotic with a high colony count (i.e., Visbiome or Proviable Forte).
- Consider empirical treatment for cholecystitis (i.e., amoxicillin clavulanic acid).
- Ultimately, GI biopsies may be necessary to get a definitive diagnosis. If pursued, consider a prophylactic cholecystectomy at the time of biopsies. Prior to anesthesia, an echocardiogram should be performed to determine if the risks of anesthesia outweigh the benefits of the procedure.





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.

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