

**DATE**

8/8/22

PRESENTING CLINICAL SIGNS

History: Originally presented for halitosis. Noted some skin fold pyoderma around muzzle but checked blood work to r/o more serious issue. Blood work showed mild anemia, hypoalbuminemia, elevations in liver enzymes and bilirubin.

PATIENT

Lilly Meloro

O came in for radiographs after seeing blood work-- thoracic rads were unremarkable, but an abdominal effusion was noted. Centesis yielded clear fluid.

SPECIES

Canine

Current Medications: N/A.

Lab Results: Attached.

BREED

Sheepdog

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

Imaging Performed By: Stephanie Warga RDCS, RVT.

SEX

Spayed Female

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**AGE**

2/2/15

Urinary System

Urinary bladder is adequately distended with anechoic contents. No masses, inflammatory changes, echogenic sediment or cystoliths are observed. The urinary bladder, trigone and visible pelvic urethra are normal in thickness with a smooth mucosal surface.

WEIGHT

88.7 Pounds

Left kidney is normal is size (7.84 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed.

INTERPRETED BYBeth Johnson, DVM
DACVIM

Right kidney is normal is size (8.29 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed.

HOSPITAL NAME

Fullerton AH

Adrenal Glands

Left adrenal gland is normal in size (2.76 cm long x 0.59 cm at cranial pole and 0.54 cm at caudal pole), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

REFERRING VET

Dr. Levine

Right adrenal gland is normal in size (3.37 cm long x 0.73 cm at cranial pole and 0.76 cm at caudal pole), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

INVOICE

16798

Spleen

Spleen is subjectively normal in size with a normal smooth capsular contour. Parenchyma is appropriately finely textured and homogenous with normal echogenicity relative to surrounding tissue (hyperechoic to liver). No focal nodules or masses are observed. Splenic vasculature appears normal.

Liver

Liver is subjectively normal to slightly small in size with a moderately undulating or scalloped capsular contour/margins, more appreciated on the left. The parenchyma is diffusely heterogeneous with increased portal markings and a coarse architecture. Patchy ill-defined areas of increased echogenicity are present

with reduced visualization of vessels. No overt nodules or masses are observed. Visible vasculature and biliary tree appear normal without distension or congestion.

Gallbladder is non-distended in size. The wall is smooth without visible thickening. Luminal contents are primarily anechoic. There is no evidence of cystic or common bile duct dilation.

Gastrointestinal

The visible stomach wall is normal in thickness and layering. The lumen of the stomach is empty with no evidence of obstruction, foreign material or infiltrative disease. Pyloric outflow tract appears patent.

The visible small intestines are normal in wall thickness and layering. Small intestinal motility appears adequate (1-3 contractions per min). The lumen of the small intestine is empty with no evidence of obstruction, foreign material or infiltrative disease.

The visible colon is normal in wall thickness and layering. Contents are consistent with normal formed feces and gas.

Pancreas

The observed pancreas appears appropriately isoechoic to surrounding omental fat. Visible capsule is smooth and normal in contour. Visible pancreatic parenchyma is homogenous and unremarkable. There is no visible pancreatic duct dilation. There is no evidence of active peripancreatic inflammation.

Free Abdomen

There is no apparent lymphadenopathy. There is a moderate amount of anechoic free fluid throughout the abdomen, as well as enhanced hyperechoic fat and mesentery in the cranial abdomen around the liver.

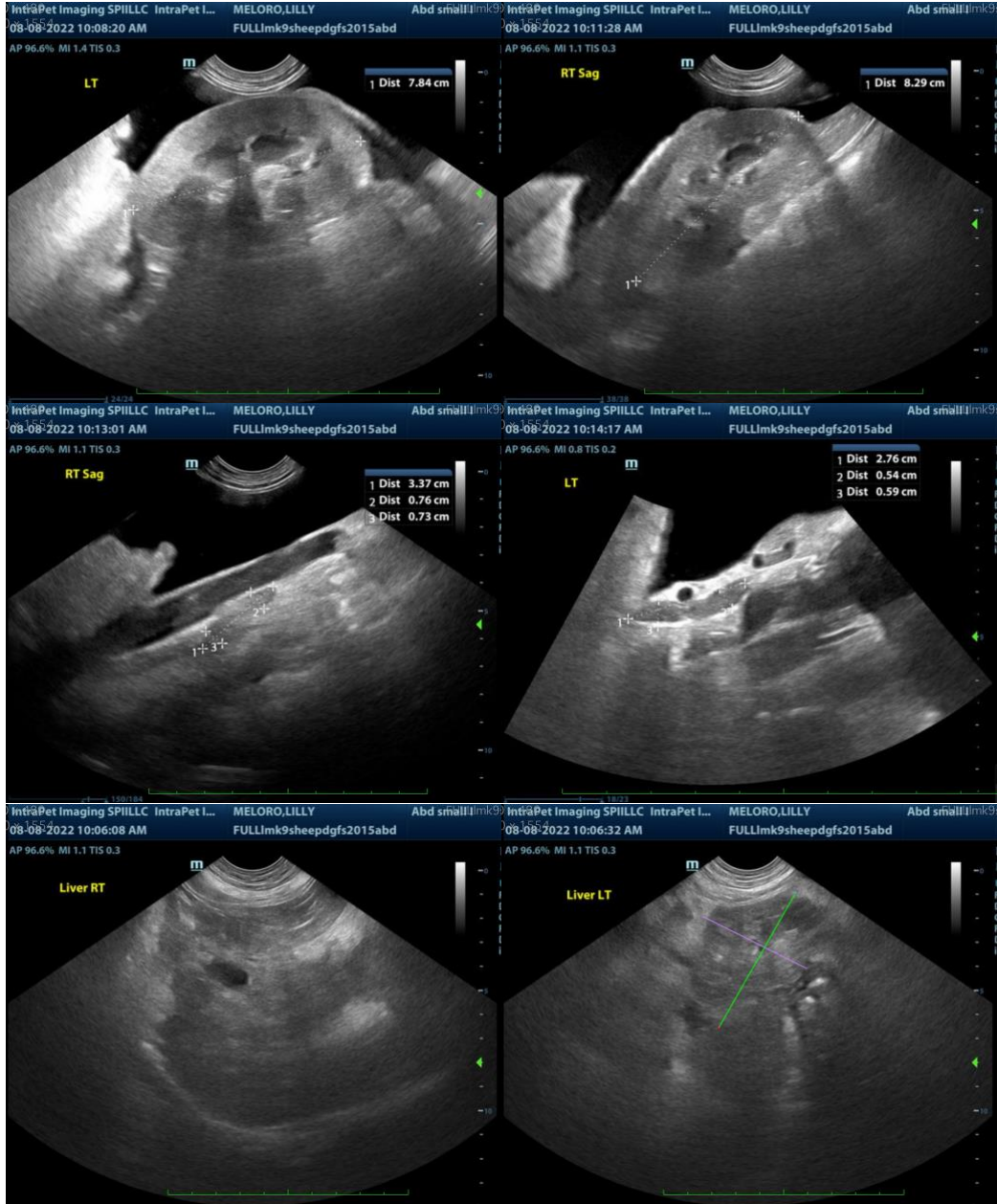
ULTRASONOGRAPHIC FINDINGS

- Changes consistent with a chronic inflammatory hepatopathy with some changes also concerning for fibrosis. Given the heterogeneous appearance, while considered less likely, infiltrative disease, such as round cell neoplasia or metastatic neoplasia can't be definitively ruled out.
- Moderate amount of anechoic free fluid.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Given this patient's low albumin, a urinalysis and, if indicated based on urinalysis results, urine culture are recommended. If protein is present in an otherwise quiet sediment, protein quantification with a urine protein to creatinine ratio is recommended.

Testing for Leptospirosis is recommended. An empirical course of antibiotics and hepatic nutraceuticals could be tried empirically, however, ultimately, tissue sampling is likely warranted. A fine needle aspirate of the liver can be performed to assess inflammatory cell type, rule in/out round cell neoplasia, etc., if patient's coagulation status is appropriate. However, if round cell neoplasia is not diagnosed, a liver biopsy, including culture of the tissue, as well as copper level assessment, is recommended to definitively diagnose the underlying hepatopathy, and therefore, guide management.





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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