

**DATE PRESENTING CLINICAL SIGNS**

10/6/21 History: Very lethargic, dark and tarry stools. Enlarged and rounded liver on radiograph.

PATIENT

Current Medications: Metronidazole 100mg bid, Famotidine 2.5mg BID, low fat gi food

Bailey Boller

Lab Results: bloodwork was wal

SPECIES

Date of Previous IntraPet Ultrasound: 04/07/2021

Canine

Sedation: Sedated with BAG.

BREED

Stat Report: Not requested.

Yorkie

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**SEX****Urinary System**

Female Spayed

The urinary bladder, trigone, and pelvic urethra are normal in thickness and the mucosal surface is smooth. The bladder lumen is moderately distended with mostly anechoic urine. No masses, inflammatory changes or calculi are observed. Ureteral papillae and visualized portion of the proximal urethra, visible to a depth of 2 cm, are normal.

AGE

2013

The left kidney is normal size (3.99 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.

WEIGHT

10.3 lbs.

The right kidney is normal size (4.01 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. Renal vasculature is normal.

INTERPRETED BY

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 Medicine)

Adrenal Glands

The left adrenal gland is enlarged (0.54 cm at cranial pole) (1.09 cm at caudal pole) (1.76 cm in length) with a 1.10 x 0.95 cm hyperechoic to heterogeneous nodule/mass at the caudal pole. There is loss of glandular detail in this region. The parenchyma at the cranial pole is normal. The phrenicoabdominal vein and surrounding vasculature are normal.

HOSPITAL NAME

Frederick Road
 Veterinary Hospital

The right adrenal gland is normal size (0.46 cm at cranial pole) (0.50 cm at caudal pole) (1.02 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.

REFERRING VET

Dr. Zakai

Spleen

The spleen is subjectively prominent in size (1.54 cm in width at the level of the hilus) with slight rounding at the poles. There is appropriate echogenicity and echotexture. No focal lesions are observed. Splenic vasculature is normal.

INVOICE

11963kk

Liver

The liver is subjectively prominent in size with rounded peripheral contours. The parenchyma is hypoechoic relative to the spleen and subtly heterogeneous in appearance with several, small, ill-defined hyperechoic nodules throughout the organ. 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. Luminal contents are anechoic. 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 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

The peritoneal cavity is normal. There is no evidence of inflammation or effusion. Two to three sublumbar lymph nodes are visualized. The largest measures 1.09 cm in length. The parenchyma and shape of the nodes appear normal.

ULTRASONOGRAPHIC FINDINGS

Primary Findings:

**An obvious cause for the patient's clinical signs is not identified in this study. Gastric ulceration secondary to primary gastrointestinal disease (i.e., IBD, neoplasia, helicobacter), low-grade, pancreatitis, or an underlying metabolic issue are considerations.

- Left adrenal nodule/mass. Differentials include neoplasia (i.e., adenoma, adenocarcinoma, pheochromocytoma) or nodular hyperplasia.
- 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 unlikely.

Secondary Findings:

- Minor, chronic, renal pathology.
- The splenic parenchyma changes are most consistent with a benign process such as lymphoid hyperplasia, extramedullary hematopoiesis or splenitis with a low possibility of infiltrative neoplasia (i.e., lymphoma, mast cell neoplasia).
- The prominent sublumbar lymph nodes are most likely reactive.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

1. An upper GI endoscopy with gastrointestinal biopsies is recommended. In the meantime, empirical treatment for gastric ulceration with a proton pump inhibitor, Sucralfate, and supportive care is recommended.
2. Empirical treatment for Helicobacter gastritis can also be considered, particularly if aggressive diagnostics are not pursued:
 - a. Amoxicillin: 10-22 mg/kg PO q 12 hours x 14-21 days
 - b. Metronidazole: 10-15 mg/kg PO q 12 hours for 14-21 days
 - c. Omeprazole: 0.7 mg/kg PO q 24 hours for 14-21 days
 - d. (+/- the addition of Bismuth subsalicylate: 3.85 mg/kg PO q 6-8 hours x 14-21 days)

3. Three-view thoracic radiographs should also be considered to assess for occult esophageal disease and to evaluate cardiopulmonary status.
4. To further evaluate the left adrenal lesion, consider a low-dose dexamethasone suppression test and urine/blood catecholamine levels as well as a baseline blood pressure measurement. Serial sonographic monitoring (i.e., every 2-3 months) should also be considered to assess for progression.





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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