

**DATE PRESENTING CLINICAL SIGNS**

8/10/21

Discomfort in cranial abdomen found on pre-dental exam. History of fully formed mucocele, patient had gallbladder surgery (cholecystectomy) liver samples from quadrate liver lobe/L Lateral liver lobe.

PATIENT

Daisy Maisenholder

Lab Results: fully formed mucocele.

SPECIES

Canine

Radiographs: Radiograph consult- ovoid soft tissue opacity noted within ventral abdomen on lateral view. location is suggestive of splenic or GI Neoplasia

BREED

Pomeranian Mix

Date of Previous IntraPet Ultrasound: 04/21/2020

Sedation: not needed

Stat Report: not requested

SEX

Female Spayed

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**AGE**

2014

Urinary System

The urinary bladder is moderately distended with anechoic urine. The wall in the mid to caudal dorsal aspect is mildly thickened (up to 0.28 cm) and slightly irregular. The remaining wall is normal in thickness with a normal layering pattern. No cystic calculi are observed. The proximal urethra is normal.

WEIGHT

18.5 lbs.

The left kidney is normal size (4.57 cm in length) with a normal shape, smooth peripheral margins, and normal internal architecture. There is mild loss of corticomedullary distinction. 0.79 cm cortical cyst is present. Several hyperechoic shadowing diverticular foci are observed. There is no evidence of pyelectasia, infarcts or hydronephrosis. Renal vasculature is normal.

INTERPRETED BY

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The right kidney is normal size (4.02 cm in length) with a normal shape, smooth peripheral margins, and normal internal architecture. There is mild loss of corticomedullary distinction. Several hyperechoic shadowing diverticular foci are observed. There is no evidence of pyelectasia, infarcts or hydronephrosis. Renal vasculature is normal.

HOSPITAL NAME

Bel Air Veterinary
Hospital

Adrenal Glands

The left adrenal gland is mildly enlarged (0.57 cm at cranial pole) (0.78 cm at caudal pole) (2.21 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. Price

The right adrenal gland is mildly enlarged (0.62 cm at cranial pole) (0.65 cm at caudal pole) (1.90 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.

INVOICE

11613kk

Spleen

The spleen is overall normal in size (1.24 cm in width at the level of the hilus). A 2.64 x 1.97 cm isoechoic to slightly mottled bulge/mass is observed just cranial to the hilus. The lesion causes mild capsular expansion. The remaining parenchyma is homogeneous. Splenic vasculature is normal with no evidence of thrombosis.

Liver

The liver is subjectively normal in size with normal curvilinear peripheral contours. The parenchyma is hypoechoic relative to the spleen and subtly mottled in appearance. No distinct focal lesions are observed.

hepatic vasculature and intrahepatic biliary tracts are of normal volume with no evidence of congestion. Previous cholecystectomy. Fossa is unremarkable.

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 minimal deviation from the normal peripheral contours. The parenchyma is isoechoic to slightly hyperechoic and subtly mottled in appearance. No distinct focal lesions are observed. The pancreatic duct is not overtly dilated. There is no evidence of peripancreatic effusion.

Free Abdomen

The peritoneal cavity is normal. There is no evidence of inflammation or effusion. The abdominal lymph nodes are normal/not visible.

Other

A brief echocardiogram reveals no evidence of pericardial effusion or obvious right atrial/auricular mass.

ULTRASONOGRAPHIC FINDINGS

Primary Findings:

- Splenic bulge/mass. Differentials include neoplasia (i.e., round cell tumor, sarcoma) versus benign pathology (i.e., focus of extramedullary hematopoiesis or lymphoid 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 less likely. However, correlation with the patient's liver values is recommended.

Secondary Findings:

- The pancreatic changes are most consistent with age-related parenchymal remodeling, potentially secondary to a prior inflammatory episode, early fibrosis or chronic pancreatitis.
- Mild, bilateral adrenomegaly (previously observed).
- Bilateral, age-related renal pathology with dystrophic mineralization.
- The significance of the dorsal bladder wall thickening is unclear. It may represent inflammation, early neoplasia, or a normal variant.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

1. Three-view thoracic radiographs are recommended to assess for pulmonary metastases.
2. A fine needle aspirate of the splenic lesion is recommended (if clotting status is appropriate). A 25-gauge needle should be used. If cytology results are inconclusive, a splenectomy with

histopathology can be considered. If surgery is pursued, a liver biopsy should also be obtained.

3. Given the pancreatic changes, consider a PLI to assess for low-grade pancreatitis as a cause for cranial abdominal pain.
4. Given the urinary bladder wall changes, consider the following:
 - a. Repeat ultrasound in 3-4 weeks.
 - b. Urinalysis +/- culture and sensitivity.
 - c. +/- Urine BRAF test
5. Baseline lab work including a CBC chemistry panel, urinalysis, and T4 is recommended if not already performed.





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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