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Pet Animal Ultrasound Service
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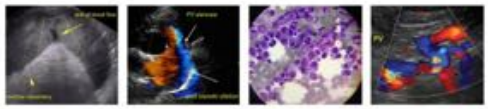


SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
1-800-838-4268 info@sonopath.com SonoPath.com

PATIENT

Roxie Hope Koziol

SPECIES

Canine

BREED

Havanese

SEX

Female Spayed

AGE

9 years

WEIGHT

18.7 lbs

INTERPRETED BY

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

IMAGING PERFORMED BY

Pamela Harrigan, RDCS

HOSPITAL NAME

VCA Palmer

REFERRING VET

Michelle Haroules, DVM

INVOICE

13858

DATE

7.26.23

PRESENTING CLINICAL SIGNS

History: PU/PD. Low Dose Dex Test +.

Abnormal PE/Chem/CBC/UA Results: ALT 246, ALK Phos 447, GGTP 31 UA-2+ Protein Microalbuminuria 29.8 Cortisol/CREAT Ratio 89.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder wall is normal in thickness and the mucosal surface is smooth. The bladder is moderately distended. Luminal contents are anechoic. No cystic calculi are observed. The region of the trigone and visible portion of the proximal urethra are normal.

The left kidney is normal in size (4.92 cm in length) with a normal shape, smooth peripheral margins, and normal internal architecture. The cortex is isoechoic relative to the spleen. There is moderate loss of corticomedullary distinction. Several hyperechoic shadowing diverticular foci are observed. Small focus of mineralization are observed. Trace pyelectasia is present. There is no evidence of infarcts or hydroureter.

The right kidney is normal in size (5.20 cm in length) with a normal shape, smooth peripheral margins, and normal internal architecture. The cortex is isoechoic relative to the spleen. There is moderate loss of corticomedullary distinction. Several hyperechoic shadowing diverticular foci are observed. Small focus of mineralization are observed. There is no evidence of pyelectasia, infarcts or hydroureter.

Adrenal Glands

The left adrenal gland is enlarged (0.73 cm at cranial pole) (1.57 cm at caudal pole) with an irregular shape. A 2.00 x 1.59 cm heterogenous mass effect is occupying the majority of the mid- to caudal aspect of the gland. Glandular echogenicity at the cranial pole are relatively normal. Surrounding vasculature appears normal.

The right adrenal gland is in normal size (0.30 cm at cranial pole) (0.40 cm at caudal pole) with a normal shape and 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 (1.42 cm in width at the level of the hilus) with a normal capsular contour. There is appropriate echogenicity and echotexture. No focal lesions are observed. Splenic vasculature is normal.

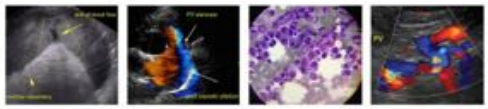
Liver

The liver is subjectively enlarged with swollen peripheral contours. The parenchyma is hyperechoic relative to the spleen and subtly heterogenous, with a few, small, ill-defined hyperechoic nodule visualized (the largest measuring 0.84 cm in diameter). Hepatic vasculature and intrahepatic biliary tracts are of normal volume with no evidence of congestion.

The gall bladder lmen is distended. The wall is normal in thickness. A large amount of aggregated, echogenic, suspended sludge in a partially 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 moderately distended with ingesta. The gastric wall and pylorus are normal in thickness with a normal



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layering pattern. The pyloric outflow tract is patent. The small intestinal lumen is not dilated. The small intestinal wall is normal in thickness with a normal layering pattern and appropriate mural detail. Discreet masses are not identified. The colonic wall is normal. The colonic lumen contains shadowing fecal material. There is no evidence of an obstructive pattern.

Pancreas

A portion of the pancreas is obscured by the gastric distention. In the visualized portion no obvious abnormalities are seen.

Free Abdomen

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

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- Left adrenal mass. Neoplasia (i.e., adenoma, adenocarcinoma, pheochromocytoma) is suspected with a lower possibility of a benign process (i.e., inflammatory focus, other). The right adrenal gland is normal.
- Gallbladder changes consistent with an emerging mucocele.
- 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. Correlation with the patient's liver values is recommended.

Secondary Findings

- Bilateral chronic renal changes with nonobstructive nephrocalcinosis and trace left pyelectasia.
- If the patient was fasted for this study, the presence of ingesta within the gastric lumen could suggest delayed gastric emptying

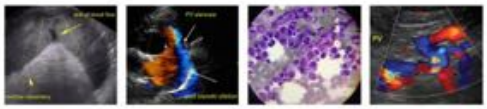
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- Regarding the left adrenal mass, consider the following:

    1. Three-view thoracic radiographs to evaluate for pulmonary metastatic disease
    2. Baseline blood pressure measurement
    3. Further testing for a functional tumor (i.e., low-dose dexamethasone suppression test, urine/blood catecholamine levels)
    4. Consider an abdominal CT scan to further characterize the lesion, particularly if a left adrenalectomy is to be considered.

- Regarding the gallbladder mucocele, consider the following:

    1. Prophylactic cholecystectomy OR
    2. If a cholecystectomy is not pursed at this time, Ursodiol therapy should be initiated with serial sonographic monitoring (i.e., every 4 weeks) to assess for progression to a fully-formed mucocele. The client should be warned of the potential for gallbladder rupture



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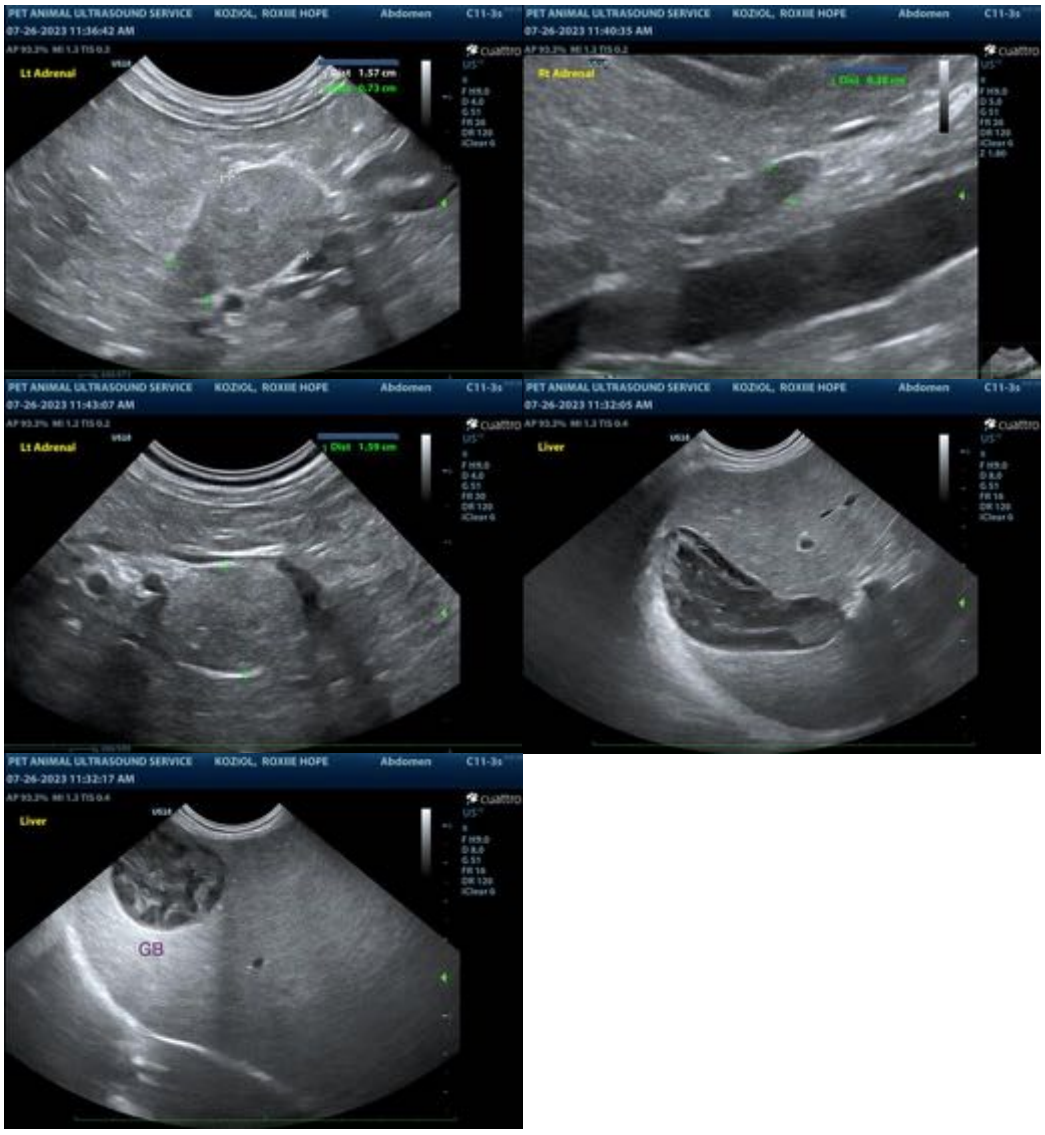
with subsequent bile/septic peritonitis if the gallbladder changes progress.



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)
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