

**DATE PRESENTING CLINICAL SIGNS**

8.18.2022 Here for annual exam; hx of increased renal values. CC- decrease in eating lately (leaving some food in dish); issues with rear legs, hx of knee surgery. PE- BARH, mm pink; worn teeth, weight loss- 10#, difficulty getting up from floor. Possible enlarged liver on palpation?

PATIENT

Bailey Voglino Current Medications: Apoquel 16mg tablet SID, Carprofen 75mg SID
Dasuquin Advanced lg dog.

SPECIES

Canine

Lab Results: ALT- 297, ALP- 12,133 (elevated several yrs), SDMA- 25

Creatinine- 2.1, BUN- 47, K+- 6.2, Na:K ratio- 23.

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

BREED

Imaging Performed By: Andi Parkinson, BS, RDMS.

Australian Cattle Dog

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**SEX**

Spayed Female

Urinary System

The **urinary bladder** wall is 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. The region of the trigone is normal.

AGE

4/6/2010

The **left kidney** is normal size (6.76 cm in length); normal shape and smooth peripheral contours. The cortex is hyperechoic with pinpoint hyperechoic to mineralized foci. There is a normal 1:3 cortex to medulla ratio with mild to moderate loss of corticomedullary distinction. Several nonobstructive nephroliths are visualized. Trace pyelectasia is present. There is no evidence of infarcts or hydroureter.

WEIGHT

69.5lbs

The **right kidney** is normal size (6.62 cm in length); normal shape and smooth peripheral contours. The cortex is hyperechoic with pinpoint hyperechoic to mineralized foci. There is a normal 1:3 cortex to medulla ratio with mild to moderate loss of corticomedullary distinction. Several nonobstructive nephroliths are visualized. There is no evidence of pyelectasia, infarcts or hydroureter.

INTERPRETED BY

Andrea Nicastro, DMV,
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(Small Animal
Internal Medicine)

Adrenal Glands

The **left adrenal gland** is enlarged (4.01 cm at cranial pole) (0.98 cm at caudal pole) (3.42 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.

HOSPITAL NAME

Essex Middle River VC

The **right adrenal gland** is normal size (0.65 cm at cranial pole) (0.77 cm at caudal pole) (2.83 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. Hicks

Spleen

The **spleen** is normal in size (1.85 cm in width at the level of the hilus) with a normal capsular contour. There is appropriate echogenicity and echotexture. A 0.92 cm hypoechoic to heterogenous nodule is observed approximately mid-spleen. In addition, a 0.65 cm hypoechoic nodule is observed in the mid to caudal aspect. Splenic vasculature is normal.

INVOICE

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Liver

The **liver** is enlarged with irregular peripheral contours. The parenchyma is isoechoic relative to the spleen. On the right side, a >13.00 cm isoechoic mass effect is observed. Within this region, 1-2 small, cavitated lesions are seen. The remaining hepatic parenchyma is homogenous.

The **gall bladder** is of normal contours and contains some dependent echogenic debris. The wall is normal in thickness. No choleliths are observed. 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. There is no evidence of an obstructive pattern.

Pancreas

A portion of the **pancreas** is obscured by the hepatic mass effect. In the visualized portions, no obvious abnormalities are seen.

Free Abdomen

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

Other

A brief echocardiogram reveals no obvious evidence of pericardial effusion.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- Right hepatic mass effect. Neoplasia (i.e., round cell tumor, adenoma, adenocarcinoma) is of primary concern. However, a benign process (i.e., inflammatory disease, excessive regenerative nodular hyperplasia) cannot be completely excluded.
- The splenic nodules could be consistent with a focus of lymphoid hyperplasia, extramedullary hematopoiesis, or similar. However, metastatic disease cannot be excluded.

Secondary Findings

- Bilateral degenerative renal changes with nonobstructive nephrocalcinosis
- The mild left adrenomegaly is most consistent with hyperplastic change.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

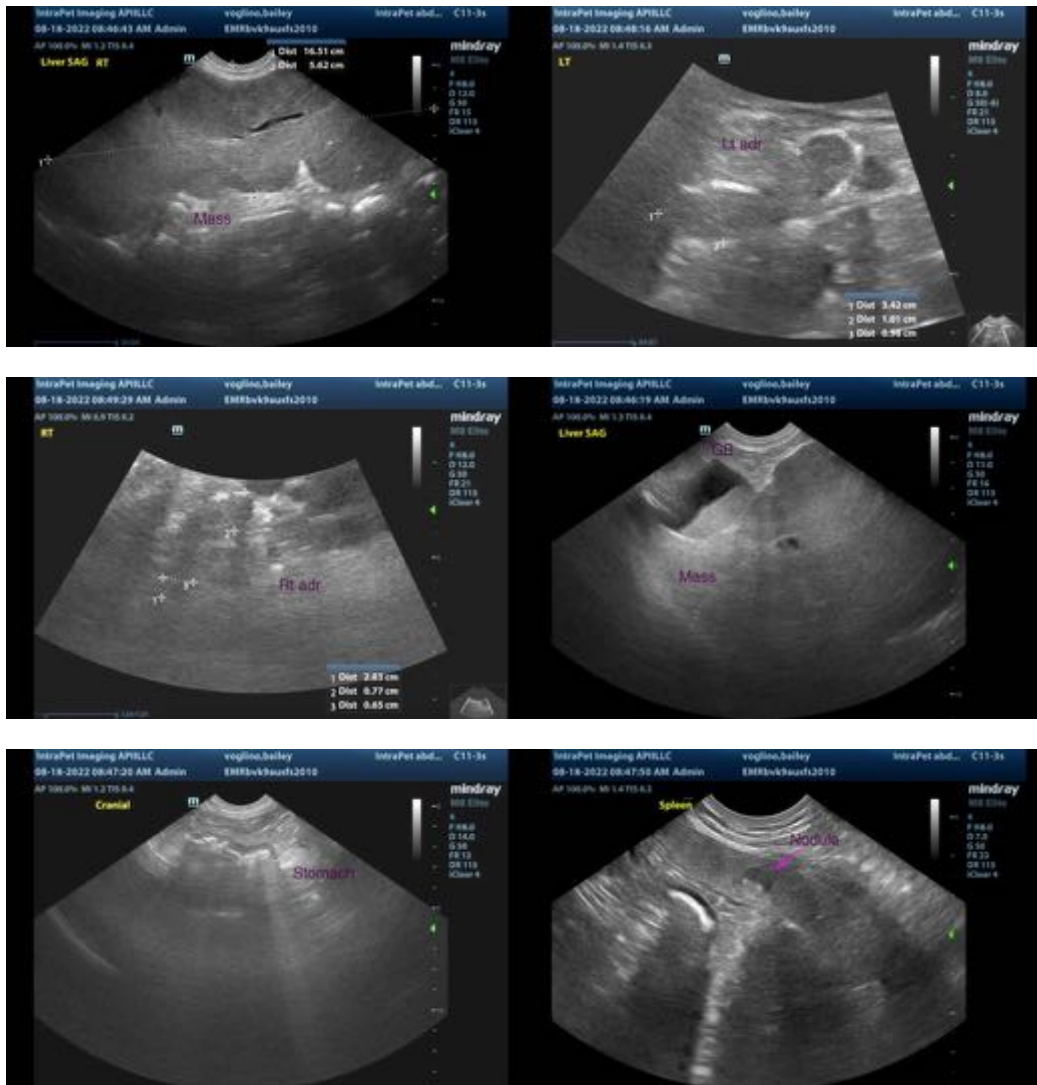
Three-view thoracic radiographs are recommended to assess for pulmonary metastases.

A fine-needle aspirate of the hepatic mass is recommended, if clotting status is appropriate. A 25-gauge needle should be used. If cytology results are inconclusive, consider a surgical liver biopsy.

Regarding the azotemia, consider the following:

1. Urinalysis
2. Urine culture and sensitivity
3. +/- UPC (if proteinuria is present)
4. Baseline blood pressure measurement
5. Consider transitioning to a prescription renal diet if the patient will tolerate it.

- Serial monitoring (i.e., every 3 months) of the patient's renal values and blood pressure is recommended to assess for progressive disease.



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.

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