**DATE**

7/27/23

PRESENTING CLINICAL SIGNS

12lb weight loss in 3 months with decreased appetite, and activity and sporadic diarrhea. Hx of struvite bladder stones in 2017 and on Rx diet. Hx of urinary incontinence past 8 months.

Current Medications: Proin 75mg 1 BID, DES 1mg q 3 days.

Lab Results: 7/20/23- ALT 365, ALP 1006, GGTP 17.

Radiographs: See attached.

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.

PATIENT

Daisy VanBergen

SPECIES

Canine

BREED

American Bulldog

SEX

Spayed female

AGE

8/1/11

WEIGHT

84.5 lbs

INTERPRETED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

HOSPITAL NAME

Alexander AH

REFERRING VET

Dr. Alexander

INVOICE

76278

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**Urinary System**

The **urinary bladder**, trigone, and pelvic urethra presented normal thicknesses and normal tone. The ureters were not visible which is normal. No uroliths or sediment were visualized and anechoic urine was present. No evidence of inflammatory or neoplastic changes was noted. Ureteral papillae were normal.

The **kidneys** revealed largely normal size and structure, corticomedullary definition and ratio (cortex 1/3 of medulla) were essentially maintained with some age-related loss of curvilinear patterns regarding the capsule and C/M junction. The cortices presented largely uniform texture with some increased echogenicity expected for his age patient. Medullary structure differed distinctly from that of the cortex and no evidence of pelvic dilation was present. The right kidney measured 7.26 cm. The left kidney measured 7.34 cm.

Adrenal Glands

The **adrenal glands** appeared slightly enlarged and swollen. No evidence of focal capsular expansion or invasion into the phrenic veins was noted. No overt suspicion of neoplasia was noted. This is considered likely a hyperplastic change associated with stress or adrenal endocrinopathy (PDH). If isosthenuria is persistently present and the patient morphologically suggests Cushing's disease then ACTH testing would be indicated. The right adrenal gland measured 3.44 x 1.37 cm at the caudal pole and 1.86 cm at the cranial pole. The left adrenal gland revealed a hyperechoic nodule at the cranial pole measuring 0.7 x 0.9 cm. The left adrenal gland measured 3.5 x 1.1 cm at the caudal pole and 1.14 cm at the cranial pole.

Spleen

The **spleen** revealed a hypoechoic, 4.5 cm, non-cavitated mass. The splenic and cardiac masses may be unrelated, yet both pathological.

Liver

The **liver** images from right and left intercostal as well as subcostal views revealed subjectively normal liver size, contour, and structure. Some age-related parenchymal remodeling was noted but likely not clinically significant at this time. Heterogenous nodular changes were noted and were non-disruptive throughout the liver. I cannot rule out metastatic disease. Vascular and biliary tracts were of normal volume and no evidence of congestion was noted. The gallbladder presented some dependent debris with essentially normal contour. The cystic and common bile ducts were normal. The hepatic lymph nodes were unremarkable.

Gastrointestinal

Examination of the **gastrointestinal tract** revealed a stomach and intestine free of stasis, of normal wall thickness, acceptable curvilinear mural detail, and peristaltic activity. Small and large intestine demonstrated

normal luminal chyme and stool consistency respectively. No obstructive or overt infiltrative disease was noted. No associated abnormal lymphatic activity was noted.

Pancreas

The base and limbs of the **pancreas** were observed to be largely isoechoic to surrounding omental fat. Pancreatic duct and capsular contour were acceptably normal and parenchyma respected normal curvilinear patterns. No overt evidence of active inflammatory or neoplastic disease was noted.

Free Abdomen

An occasional, hyperechoic nodule was noted and was non-disruptive measuring 3.5 x 2.8 cm.

Heart

Concurrent cardiac mass was noted in this patient and measured 3.8 x 3.3 cm in the position of an aortic body tumor. No pericardial effusion was noted. This does not appear to be affecting cardiac function at this time.

ULTRASONOGRAPHIC FINDINGS

Splenic mass. Round cell neoplasia, hemangiosarcoma and hyperplasia is less likely.

Heart base tumor, may be unrelated.

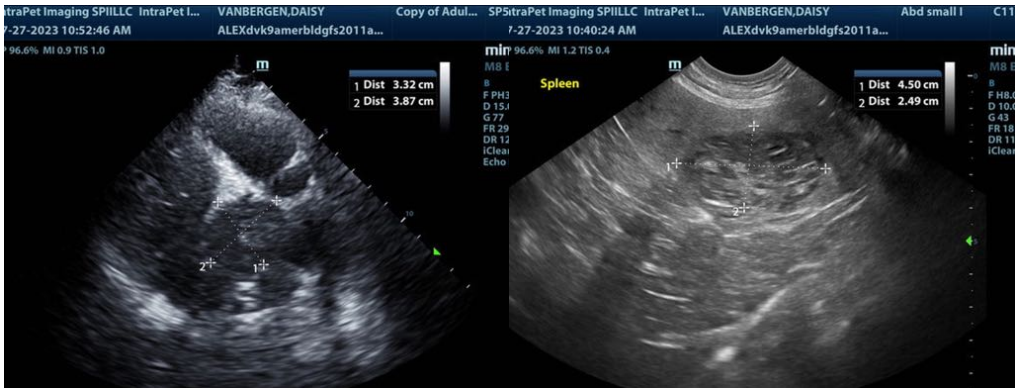
Bilateral adrenal hypertrophy with remodeling.

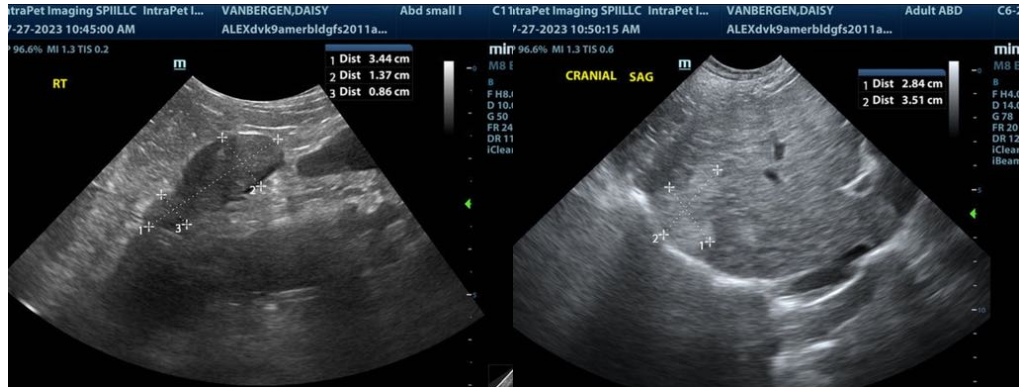
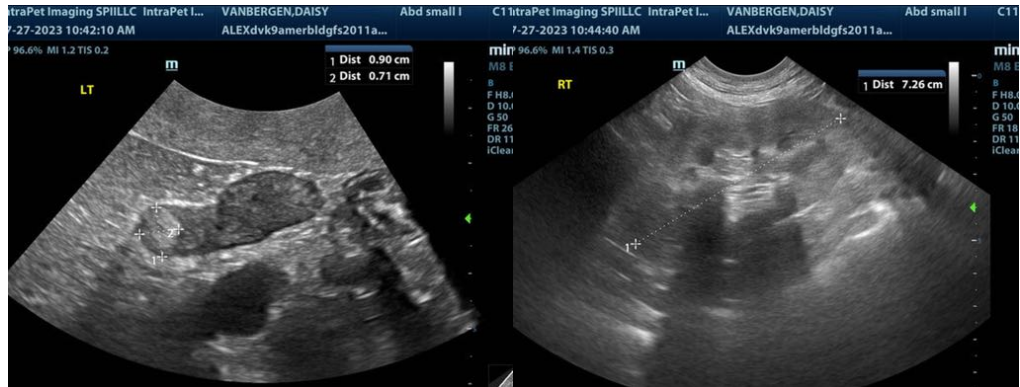
Nodular hepatic changes. Pronounced nodular hyperplasia or metastatic disease are the primary concerns.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Screening 25-gauge FNA of the splenic mass and liver nodules are recommended. A separate liver nodule was noted at the medial aspect of the midbody and measured 1.7 cm. FNA is also indicated. Given the splenic mass, if related to the cardiac mass I would expect a more typical position in the right auricle or right ventricular free wall. The position of the mass in the heart is that of an aortic body tumor or chemodectoma. I recommend blood pressure measurements and oncological consultation based on the splenic and cardiac presentations. Note that if we presume that the cardiac tumor is aortic body tumor these are typically slow growing and common within this breed. Therefore, there may be some value to direct splenectomy and liver biopsy after screening FNA. Chest radiographs are warranted if not already performed to assess for comorbidities. If the patient appears Cushingoid eventual work-up for PDH is indicated given the adrenal presentation.







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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