
**PATIENT PRESENTING CLINICAL SIGNS**

Brooklyn DeSantis

**SPECIES**

Canine

**BREED**

Lab Retriever Mix

**SEX**

Spayed Female

**AGE**

14 years

**WEIGHT**

60 lbs

History: Previous ultrasound reports submitted 4/16/2021, 1/8/2021, 10/16/2020 (confirmed Cushing's and started veteryl), 9/11/2020. Since her ultrasound in 4/2021, she has been diagnosed with a heart murmur, Hypothyroidism (started on thyro-tabs), and Glaucoma. 12/22/2021 presented for boarding where we noticed swelling in her left hind hock, performed rads and synovial joint tap - referred to oncologist (attached.) Presented 5/6/22 for vaccine and Dr. Goodman noticed abnormality with her left eye, performed stained and started on Neo/Poly/Bac ointment. Most recently presented 5/31/22 for vomiting and inappetence for about a day. Performed in house CBC/Chem/UA/SDMA and uncovered a UTI - culture pending. Administered ondansetron, entyce and SQF. Returned 6/1 for hospitalization with multimodal CRI of ketamine and lidocaine, received more ondansetron, famotidine, entyce. Ate less than 1/4 can of bland food. Went home that evening and was moving around better, but still not interested in food. Today (6/2) performed chest x-rays - report pending. Sent out CBC/Chem/T4/PLI to lab - results pending. Current medications: Veteryl, 80mg total SID in AM Thyro-tabs 0.7mg, 1 tab SID Gaba 300mg, 1 cap BID T relief - twice a day NeoPolyDex Opth. Sol, 1 drop OS BID Dorzolamide + Timolol Opth. Sol, 1 drop OS TID

Cushing's Disease. Bloodwork shows a hematocrit of 32%. Mild leukocytosis with a monocytosis B 137. ALP 769. USG 1.025. Proteinuria. Inactive sediment.

Abnormal PE/Chem/CBC/UA Results: 5/6/2022: The sclera is injected, corneal edema present, and neovascularization almost to the central portion of the cornea PLR - absent OS, OD normal direct and indirect Iris is abnormal with iris atrophy as well as suspicious of synechia Fluorescein stain = negative for stain uptake Tonopen: OS = 7, OD = 5 Ophtho on Monday 5/9 at 4:45 bloodwork from 5/31 attached

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**
**INTERPRETED BY**

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

**Urinary System**

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 1 cm, are normal.

**IMAGING PERFORMED BY**

Dr. Goodman

The left kidney is normal size (6.86 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with mild loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter.

**HOSPITAL NAME**

Evendale-Blue Ash PH

The right kidney is normal size (7.47 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with mild loss of corticomedullary distinction. A small cortical cyst is seen. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter.

**REFERRING VET**

Dr. Goodman

**Adrenal Glands**

The left adrenal gland is enlarged (1.15 cm at cranial pole) (1.47 cm at caudal pole); with an irregular 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**

11007

The right adrenal gland is enlarged (1.92 cm at cranial pole) (1.54 cm at caudal pole) (5.85 cm in length); with a slightly irregular shape. A 2.19 x 1.43 cm, ill-defined, hyperechoic nodule is observed at the cranial

**DATE**

6/2/22

pole. Glandular echogenicity and detail at the caudal pole are normal. The phrenicoabdominal vein and surrounding vasculature appear normal.

### ***Spleen***

The spleen is normal in size (2.41 cm in width at the level of the hilus) with a normal capsular contour. There is appropriate echogenicity and echotexture. A 1.68 x 1.45 cm irregular, hypoechoic to slightly heterogenous nodule is observed at the cranio-lateral aspect. The lesion does not appear to disrupt the capsule.

### ***Liver***

The liver is prominent in size with swollen to slightly irregular peripheral contours. The parenchyma is isoechoic relative to the spleen and mildly heterogenous in appearance. A 6.56 x 4.79 cm irregular, heterogenous, cavitated mass is observed in the region of the right, medial lobe, adjacent to the gall bladder. A 4.20 x 3.45 cm heterogenous mass is observed in the right lateral lobe. The lesion causes capsular expansion. 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. A moderate amount of aggregated, echogenic, partially dependent debris/sludge 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 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 left limb of the pancreas is visible with normal curvilinear peripheral contours. The parenchyma is largely isoechoic relative to surrounding omental fat and slightly mottled in appearance. The pancreatic duct is visible but not overtly dilated. There is no evidence of peripancreatic inflammation or effusion.

### ***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**

- Hepatic masses. These lesions were previously observed and appear slightly larger. The hypoechoic nodule that was previously observed adjacent to the diaphragm is not visible on today's scan.

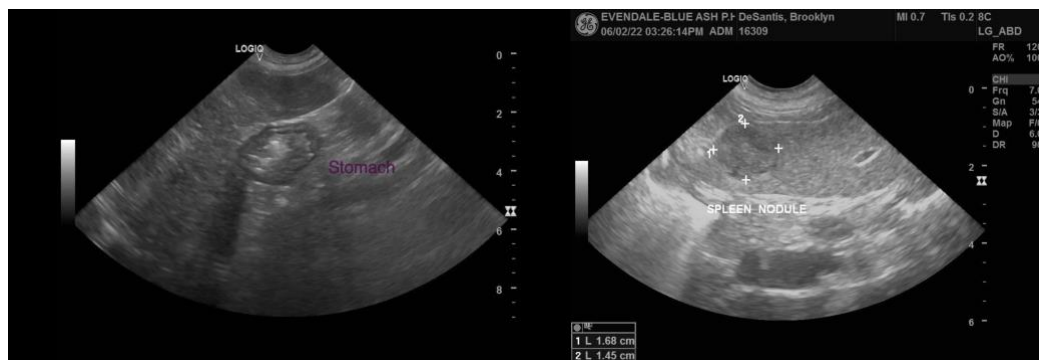
- The splenic nodule, which is a new finding, may represent a metastatic lesion. Alternatively, a benign process (i.e., a focus of lymphoid hyperplasia, extramedullary hematopoiesis or similar) is also possible.

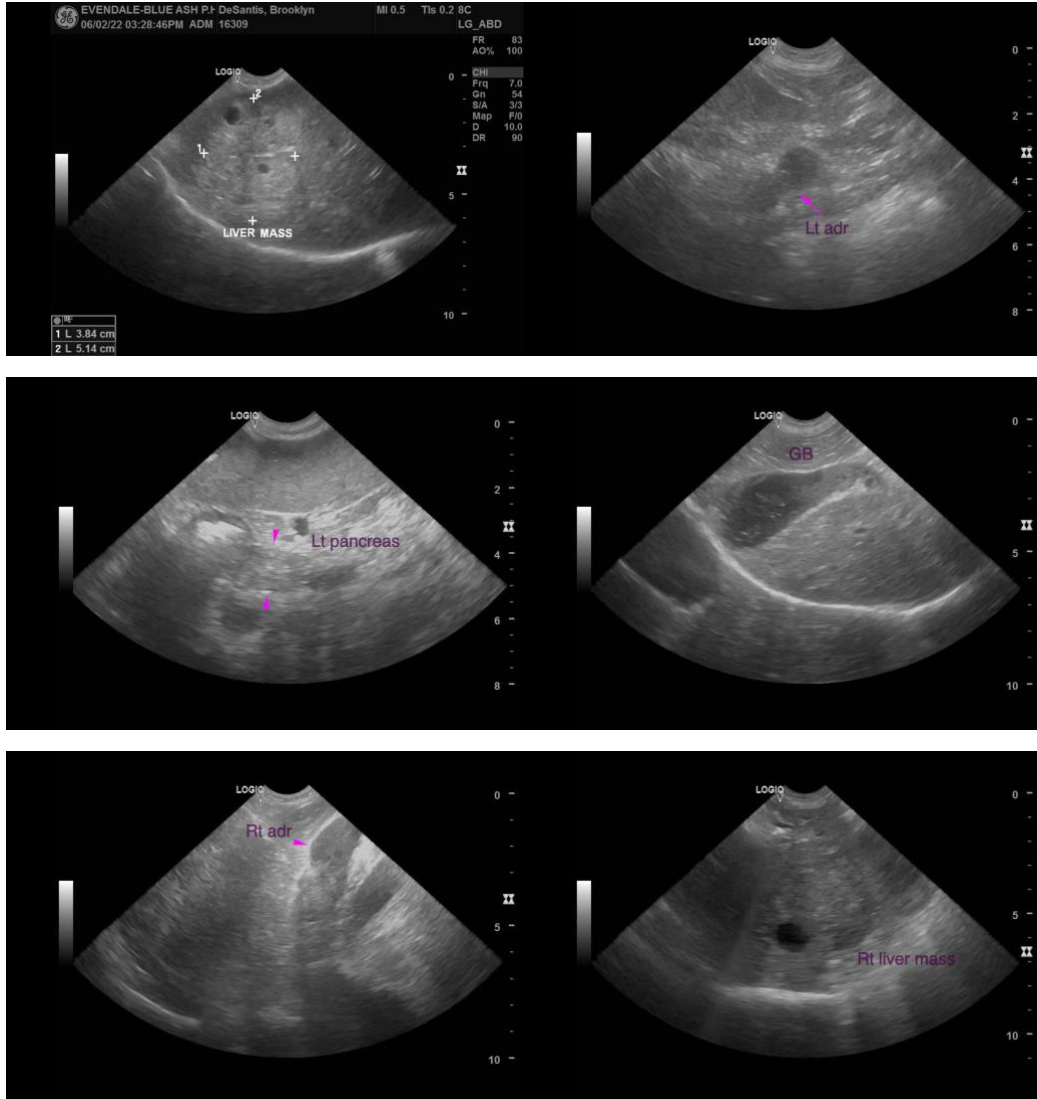
### Secondary Findings

- Gall bladder debris/sludge, non-mucocele
- The pancreatic changes are most consistent with age-related parenchymal remodeling, potentially secondary to a prior inflammatory episode, early fibrosis, or chronic pancreatitis.
- The bilateral adrenomegaly is consistent with the previous diagnostics of pituitary dependent hyperadrenocorticism.
- Minor bilateral, chronic renal changes

### INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- Three-view thoracic radiographs are recommended to assess for pulmonary metastases.
- A fine-needle aspirate of the splenic nodule can be considered (to assess for metastatic disease) if clotting status is appropriate.
- Regarding the hepatic masses, if an aggressive approach is desired, referral to a board-certified surgeon can be considered to discuss mass removal or debulking. An abdominal CT scan would be useful in presurgical planning. If palliative care is recommended, continued symptomatic treatment is recommended.





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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