

**DATE**

6/21/22

**PRESENTING CLINICAL SIGNS**

Presented 6/16/22 for evaluation of a mass on the proximal caudal right thigh found after patient was groomed/shaved. Owner reports Baxter had left dribbles of urine at the top of the steps indoors for 2-3 months, however he urinates normally outside and has had no other accidents inside. He vomited food 6/7/22 and liquid with hair (before he was groomed) 6/11/22. He is pushy about wanting food. Exam 6/16/22 bar, bcs 8/9, heart/lungs clear, 4cm smooth subcutaneous mass right proximal caudal thigh. anal sacs, rectal exam nsf

Current Medications: None.

**PATIENT**

Baxter Lance

**SPECIES**

Canine

Lab Results: cbc platelets 443K increased, alp 508 increased, triglycerides 610 increased, precision psl 167 increased, urine sg 1.050, ph 7.5, protein 1+, bili 1+, wbc, rbc 0-1/hpf, bacteria none seen, casts none seen, amorphous phosphate (11-20) and struvite (0-1) crystals

fna mass right rear leg fat droplets, accuplex all negative, T4 2.6, free T4 pending.

**BREED**

Shih Tzu

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

Imaging Performed By: Rachel Brillhart, RDMS.

**SEX**

Neutered male

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN****AGE**

7/2/13

**Urinary System**

The urinary bladder is not fully distended, but its contents are anechoic. The wall is smooth and regular. No abnormalities are noted with the trigone or proximal urethra, and there is no evidence of sediment, cystoliths, polyps or a mass.

**WEIGHT**

20 lbs

**Prostate**

The prostate is homogenous and measures 7.3 mm; within normal limits for a neutered male.

**INTERPRETED BY**

Lisa Carioto, DVM,  
DVSc, Diplomate  
ACVIM

**Kidneys**

The **left** kidney measures 4.20 cm. The capsule is smooth. Its overall architecture, including the definition of the cortico-medullary junction, is preserved. There are no signs of nephroliths or pyelectasia. Blood flow is within normal limits. The surrounding mesentery is not hyperechoic.

The **right** kidney measures 4.00 cm. Its overall architecture, including the definition of the cortico-medullary junction, is preserved. There are no signs of nephroliths or pyelectasia. Blood flow is within normal limits.

The surrounding mesentery is not hyperechoic.

**HOSPITAL NAME**

Jacksonville VH

**Aortic bifurcation/trifurcation**

No abnormalities observed.

**REFERRING VET**

Dr. Burk

**Adrenal Glands**

The **left** adrenal gland measures 0.63 cm at the cranial pole, 0.45 cm at the caudal pole and 2.06 cm in length. No abnormalities are noted with the gland's overall architecture, echogenicity or echotexture. The phrenico-abdominal vein and surrounding vasculature and mesentery are unremarkable.

**INVOICE**

31145

The **right** adrenal gland measures 0.57 cm at the cranial pole, 0.60 cm at the caudal pole and 2.06 cm in length. No abnormalities are noted with the gland's overall architecture, echogenicity or echotexture. The phrenico-abdominal vein and surrounding vasculature and mesentery are unremarkable.

**Spleen**

The spleen is within normal limits in size, architecture, echotexture, and echogenicity. The capsule is smooth. Occasional perivascular cuffing is observed, which is consistent with myelolipomas. The latter are not clinically significant. No abnormalities are observed with its vasculature, i.e. congestion and thrombi are not identified.

### **Liver**

There are no obvious signs of hepatomegaly and its borders are smooth and sharp. The liver's echotexture is homogeneous and it is within normal limits in echogenicity. Focal lesions are not observed and no abnormalities are observed with the hepatic vessels.

The gallbladder (GB) wall is within normal limits in thickness and echogenicity. A very small amount of echogenic material is present within the GB. However, it enters the cystic duct and mild hyperechogenicity surrounding the cystic duct is observed. There are no signs of choleliths. The cystic duct cannot be followed to the common bile duct due to gas in the surrounding GI tract. There are no signs of an obstruction.

### **Gastrointestinal**

A large amount of ingesta is present in the lumen of stomach. The gastric wall is within normal limits in thickness and the wall layers are well defined, however, the submucosa is mildly prominent. A "to and fro" motion, i.e., ineffective peristalsis, is observed.

The small intestinal wall thickness, including the duodenum, is within normal limits and the definition of the wall layers is preserved. Abnormally dilated loops of bowel are not observed.

The colonic wall is not thickened and mural detail is considered normal. Formed stools are present within the colon.

### **Pancreas**

The **right limb** and **body** is mildly to moderately enlarged and mildly hypoechoic. Its contours are slightly irregular. It has a slightly coarse, heterogeneous echotexture, consisting of hypoechoic nodules of variable size and pinpoint to punctate hyperechoic foci scattered throughout the parenchyma. The former abnormalities are suggestive of active pancreatitis, while the latter are most likely due to age-related changes, such as nodular hyperplasia and fibrosis, respectively. Fibrosis may occur secondary to age, previous episodes of pancreatitis, mineralization, as well as amyloid deposition. The surrounding mesenteric fat is mildly to moderately hyperechoic. Overt signs of neoplasia are not noted.

The **left limb** has a very mildly coarse echotexture. These changes are suggestive of age-related changes. Signs of active pancreatitis or neoplasia are not appreciated.

### **Other**

#### **Lymph nodes**

No abnormalities are observed

**Abdominal effusion** is not visualized.

**Subcutaneous mass** right perianal/thigh region: The mass, which measures 3.55 cm in diameter x 4.57 cm in length, is homogeneous. It measures 4.61 cm in diameter x 3.69 cm in length in a different view. The mass is avascular when evaluated with colour Doppler. A hyperechoic capsule appears to encircle the mass.

## **ULTRASONOGRAPHIC FINDINGS**

- **Pancreas:** Signs of active pancreatitis are noted, in addition to age-related changes, such as nodular hyperplasia and fibrosis. Fibrosis may occur secondary to age, previous episodes of pancreatitis, mineralization, as well as amyloid deposition. Overt signs of neoplasia are not noted.
- **Gallbladder (GB):** A very small amount of sludge is present within the GB, however, signs of subtle inflammation are noted in the cystic duct, therefore, cholestasis and cholecystitis, as well as cholangitis/cholangiohepatitis cannot be excluded. Gallbladder sludge is often clinically insignificant, however, gastroesophageal reflux disease (GERD), can occur in some patients. Obtaining a history regarding signs of GERD from the client is suggested. Treatment with an anti-acid, proton pump inhibitor or ursodeoxycholic acid may be required.
- **Adrenal glands:** Both glands are at the high end of the normal reference range for a dog of Baxter's stature (0.60 cm). No abnormalities are noted with their architecture, echogenicity, or echotexture. Adrenal hyperplasia secondary to stress or underlying disease may be present. Another possibility is pituitary dependent hyperadrenocorticism (HAC), i.e., adrenal glands can be within the normal reference range.
- **Gastrointestinal tract:** A delay in gastric emptying is suspected if Baxter was fasted. Otherwise, no abnormalities are noted with the GI tract. Note, the absence of sonographic changes does not exclude inflammatory bowel disease.
- **Urinary bladder:** No obvious abnormalities are noted with the trigone, urethra, prostate or region caudal to the prostate to explain the incontinence ("dribbling of urine"). An in-depth evaluation of the bladder wall was not possible due to inadequate filling of the urinary bladder, however, the mucosa was smooth and regular.
- **Subcutaneous mass right perianal region:** A lipoma is suspected based on the sonographic appearance, which is consistent with the cytology results. A liposarcoma is considered less likely, but cannot be excluded without performing histopathology.

## **INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

The following are suggested/recommended

Confirmation whether Baxter was fasted at the time of the blood work, particularly for the triglycerides and cholesterol concentrations, as these results will influence dietary recommendations.

Confirmation whether he was fasted for the abdominal ultrasound, to exclude a delay in gastric emptying and peristalsis.

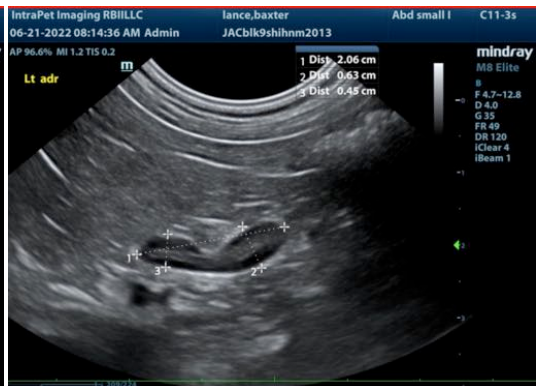
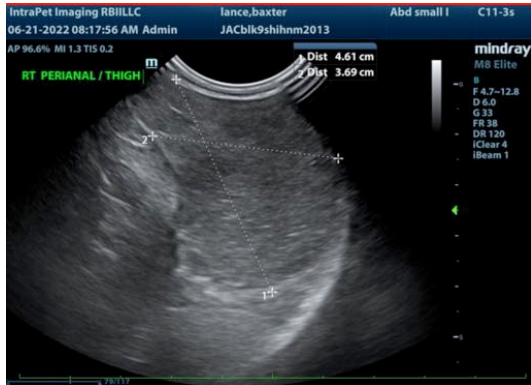
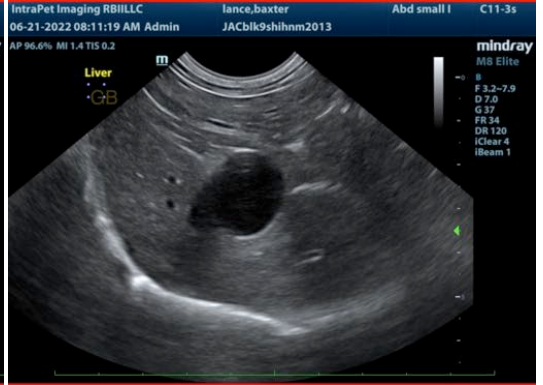
Obtaining a history regarding signs of GERD from the client is suggested. Treatment with an anti-acid, proton pump inhibitor or ursodeoxycholic acid may be required.

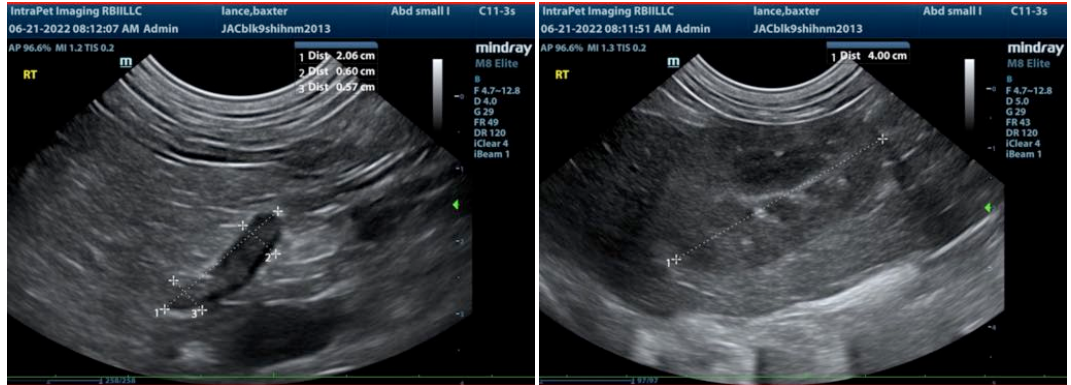
Urine culture to exclude subclinical bacteruria, which can exacerbate urethral incompetence and cause incontinence.

If the culture is negative, a urine protein: creatinine ratio is suggested

Arterial blood pressure is recommended to rule out hypertension







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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