

**DATE PRESENTING CLINICAL SIGNS**

2/2/23 Vomiting/diarrhea off and on for ~1 month, new grade 2 heart murmur; concern for abdominal & cardiac pathology on x-rays.

**PATIENT**

Gizmo Le Gette Current Medications: Ondansetron, Metronidazole.  
Radiographs: Cardiomegaly, poss. cranial mediastinal lesion, abdomen had a ventrally deviated colon and intestines were deviated to the R lateral side.

**SPECIES**

Canine Date of Previous IntraPet Ultrasound: No previous.  
Sedation: Not required to complete full diagnostic ultrasound.  
Stat Report: Not requested.

**BREED**

Yorkshire Terrier X

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN****Urinary System**

Urinary bladder is adequately distended. It has a normal uniform wall thickness. Contents include primarily anechoic fluid with occasional echogenic non-shadowing debris, most consistent with exfoliated cells, mucous and/or small blood clots. Both sterile inflammation as well as urinary tract infection can also present with echogenic debris. No masses or cystoliths are observed. The trigone and visible pelvic urethra are normal in thickness with a smooth mucosal surface.

**SEX**

Neutered Male

**AGE**

7/11/09

Prostate is normal in size, echotexture and echogenicity for a neutered male.

**WEIGHT**

15.4 Pounds

Kidneys are overall normal in size and shape with smooth peripheral margination. A normal 1:3 cortex to medulla ratio is maintained. The medulla and cortices are uniform in texture with some mild increased cortical echogenicity and mild loss of corticomedullary distinction, expected in this age patient. There is no evidence of mineral or infarcts observed. The left kidney measures 4.49 cm with mild pyelectasia at 0.27 cm in the transverse view and an approximately 1.0 cm cortical cyst. The right kidney measures 4.47 cm.

**INTERPRETED BY**

Beth Johnson, DVM  
DACVIM

**Adrenal Glands**

The right adrenal gland is normal in size (2.38 cm long x 0.64 cm at the cranial pole and 0.52 cm.), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

**HOSPITAL NAME**

Bayside AMC

The left adrenal gland is normal in size (2.03 cm long x 0.69 cm at the cranial pole and 0.88 cm at the caudal pole), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

**REFERRING VET**

Dr. DeLozier

**Spleen**

The spleen is subjectively normal in size with a normal smooth capsular contour. Parenchyma is appropriately finely textured and homogenous with normal echogenicity relative to surrounding tissue (hyperechoic to liver). No focal nodules or masses are observed. Splenic vasculature appears normal.

**INVOICE**

44745

**Liver**

The liver is subjectively normal in size with normal smooth curvilinear peripheral contour. Parenchyma is appropriately hypoechoic to the spleen in echogenicity and appropriately mildly coarse and homogenous in echotexture. In the mid liver adjacent to the gallbladder, just cranial to the pylorus, there is a 3.75-4.0 cm round, heterogeneous, primarily hypoechoic, partially cavitated mass that appears to be liver in origin. The mass is surrounded by a very scant amount of anechoic free fluid as well as markedly enhanced hyperechoic tissue and fat, and the inflammatory changes extend caudally around the pylorus and stomach. Visible vasculature and biliary tree appear normal without distension or congestion.

Gallbladder is moderately distended with anechoic bile as well as mild to moderate suspended and gravity dependent echogenic debris. The wall is smooth without visible thickening. There is no evidence of cystic or CBD dilation. There is no evidence of effusion or inflammation.

### ***Gastrointestinal***

The stomach wall is normal in thickness (canine < 0.5 cm and feline < 0.4 cm) and layering. The lumen of the stomach is empty with no evidence of obstruction, foreign material or infiltrative disease. Pyloric outflow tract appears patent.

The visible small intestines are normal in wall thickness and layering (canine duodenum < 0.5 cm and feline duodenum < 0.4 cm; other < 0.3 cm). Small intestinal motility appears adequate (1-3 contractions per min). The lumen of the small intestine is empty with no evidence of obstruction, foreign material or infiltrative disease.

The visible colon is normal in wall thickness (< 0.2 cm) and layering. Contents are consistent with normal formed feces and gas.

### ***Pancreas***

The pancreatic parenchyma is appropriately isoechoic to surrounding tissue. Visible capsule is smooth and normal in contour. There is no visible pancreatic duct dilation. There is no evidence of active peripancreatic inflammation.

### ***Other***

There is a very scant amount of anechoic free fluid and echogenic hyperechoic mesenteric fat surrounding the mass described above.

There is no apparent lymphadenopathy noted in these images.

There is no evidence of pulmonary or mediastinal lesions present in these images.

## **PRIMARY FINDINGS**

- **Liver mass with evidence of a focal peritonitis surrounding the mass** – This is concerning for infiltrative neoplasia such as sarcoma versus primary hepatocellular carcinoma, versus potentially infiltrative round cell neoplasia, or other. A benign lesion such as an abscess or complicated cyst, hematoma, or other is possible but considered less likely.

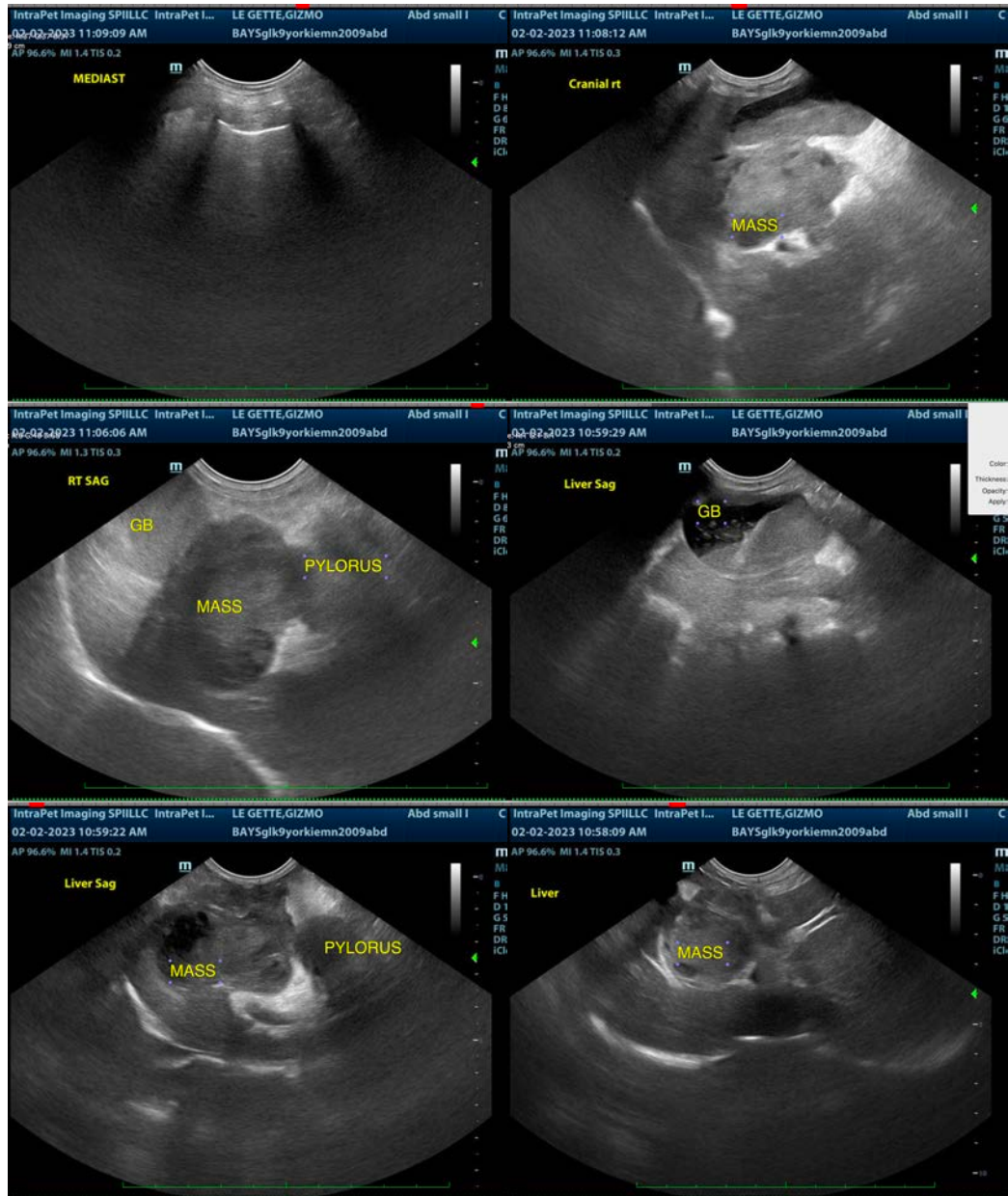
## **SECONDARY FINDINGS**

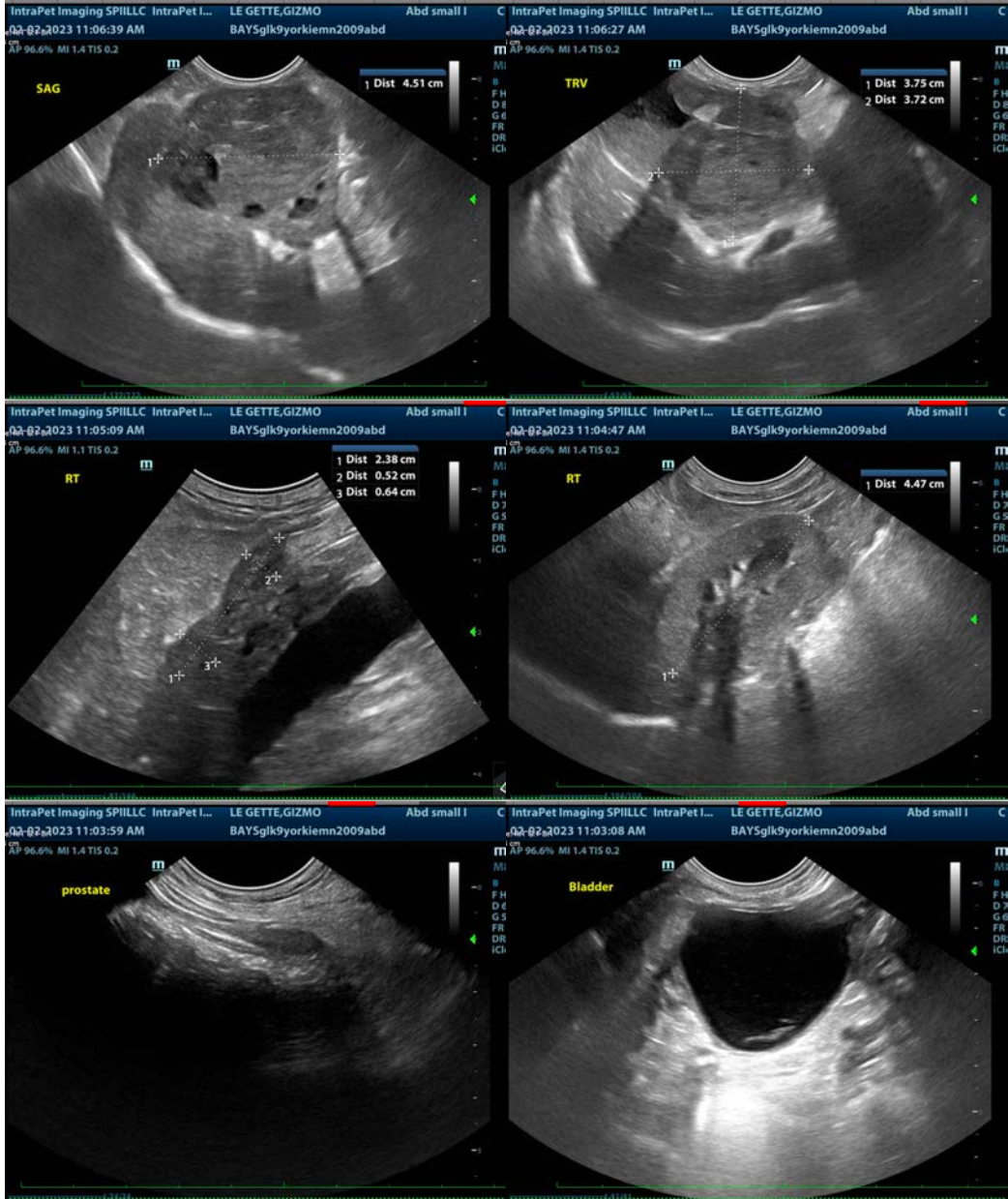
- Urinary bladder debris
- **Mild to moderate gallbladder debris** - Cholecystic debris is of unknown clinical significance. It can be seen with biliary stasis from fasting or illness. Cholecystic debris is not necessarily related to hepatobiliary disease. Echogenic bile is most commonly an incidental finding in dogs and should be interpreted in combination with clinical signs such as nausea, inappetence, cranial abdominal discomfort and/or laboratory changes such as increased ALP and/or increased Tbili.
- Age related kidney changes with mild pyelectasia and a cortical cyst noted in the left kidney

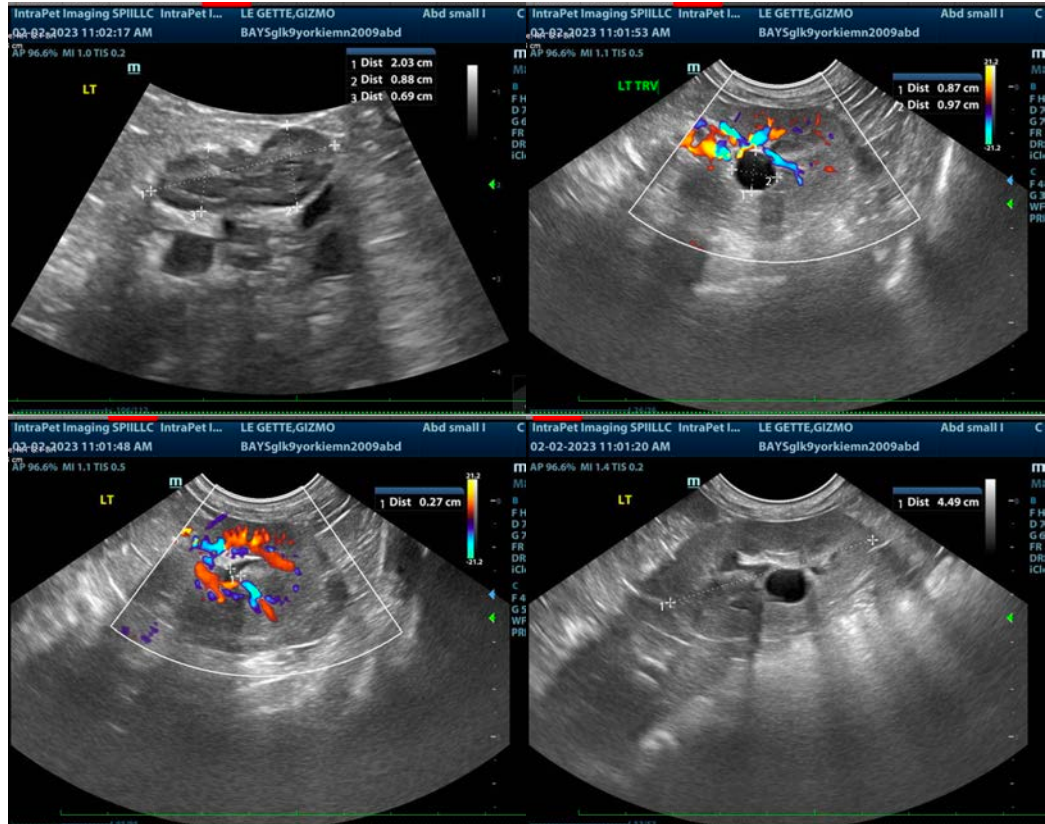
## **INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

As is reportedly already pending, thoracic radiographs +/- an echocardiogram are recommended.

A fine needle aspirate of the liver mass for both cytology as well as culture and sensitivity could be considered if patient's coagulation status is appropriate, or alternatively, an exploratory laparotomy could be planned for mass excision and biopsy. The mass is focal and likely fully resectable. However, its location may present complications. If surgery is elected, a pre-surgical planning abdominal CT scan may be helpful.







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.

**Beth Johnson, DVM, DACVIM**  
Beth.Johnson@sonopath.com