

**DATE**

12/19/22

**PRESENTING CLINICAL SIGNS**

History: P presented for ~2 month history of intermittent gagging, typically after drinking water. P has hx of cushing's disease and multiple subcutaneous masses.

**PATIENT**

Hannibal Vourvoulas

Current Medications: Vetoryl 30mg in AM, 20mg in PM  
 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.

**SPECIES**

Canine

**BREED**

Beagle

**SEX**

Neutered Male

**AGE**

9/1/12

**WEIGHT**

43.3 Pounds

**INTERPRETED BY**Beth Johnson, DVM  
DACVIM**HOSPITAL NAME**

Eastern AH

**REFERRING VET**

Dr. Wu

**INVOICE**

20203

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

Urinary bladder is adequately distended with anechoic contents. No masses, inflammatory changes, echogenic sediment or cystoliths are observed. The urinary bladder, trigone and visible pelvic urethra are normal in thickness with a smooth mucosal surface.

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

Left kidney is normal is size (5.54 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed.

Right kidney is normal is size (5.38 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed.

**Adrenal Glands**

Left adrenal gland is normal in size (2.53 cm long x 0.58 cm at cranial pole and 0.59 cm at caudal pole), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

Right adrenal gland is normal in size (2.15 cm long x 0.63 cm at cranial pole and 0.69 cm at caudal pole), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

**Spleen**

Spleen contains a large 5+ x 10+ cm heterogenous vascular, primarily hypoechoic, partially cavitated mass disrupting the capsule.

**Liver**

Liver is subjectively enlarged with mildly irregular margins. Parenchyma is heterogenous characterized by multiple poorly defined hypoechoic nodules within otherwise hyperechoic liver parenchyma. Visible vasculature and biliary tree appear normal without distension or congestion.

Gallbladder is moderately distended with anechoic bile as well as mild 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 visible stomach wall is normal in thickness 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. 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 and layering. Contents are consistent with normal formed feces and gas.

### ***Pancreas***

The observed pancreas appears appropriately isoechoic to surrounding omental fat. Visible capsule is smooth and normal in contour. Visible pancreatic parenchyma is homogenous and unremarkable. There is no visible pancreatic duct dilation. There is no evidence of active peripancreatic inflammation.

### ***Free Abdomen***

There is no evidence of peritoneal effusion. There is no apparent lymphadenopathy.

### ***Other***

\*\*Further cardiac/thoracic imaging, at this time, was declined.

## **ULTRASONOGRAPHIC FINDINGS**

### **Primary Findings**

- A Large vascular hypoechoic splenic mass, concerning for infiltrative neoplasia, such as sarcoma versus round cell neoplasia versus other, however, benign lesion, such as extramedullary hematopoiesis, etc. can mimic neoplasia and cannot be differentiated without tissue sampling.
- Heterogenous Liver – These changes are most consistent with benign processes such as nodular hyperplasia, steroid (vacuolar) hepatopathy, extramedullary hematopoiesis or possibly chronic inflammatory disease and less commonly infiltrative round cell or metastatic neoplasia.

### **Secondary Findings**

- Mild 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.

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

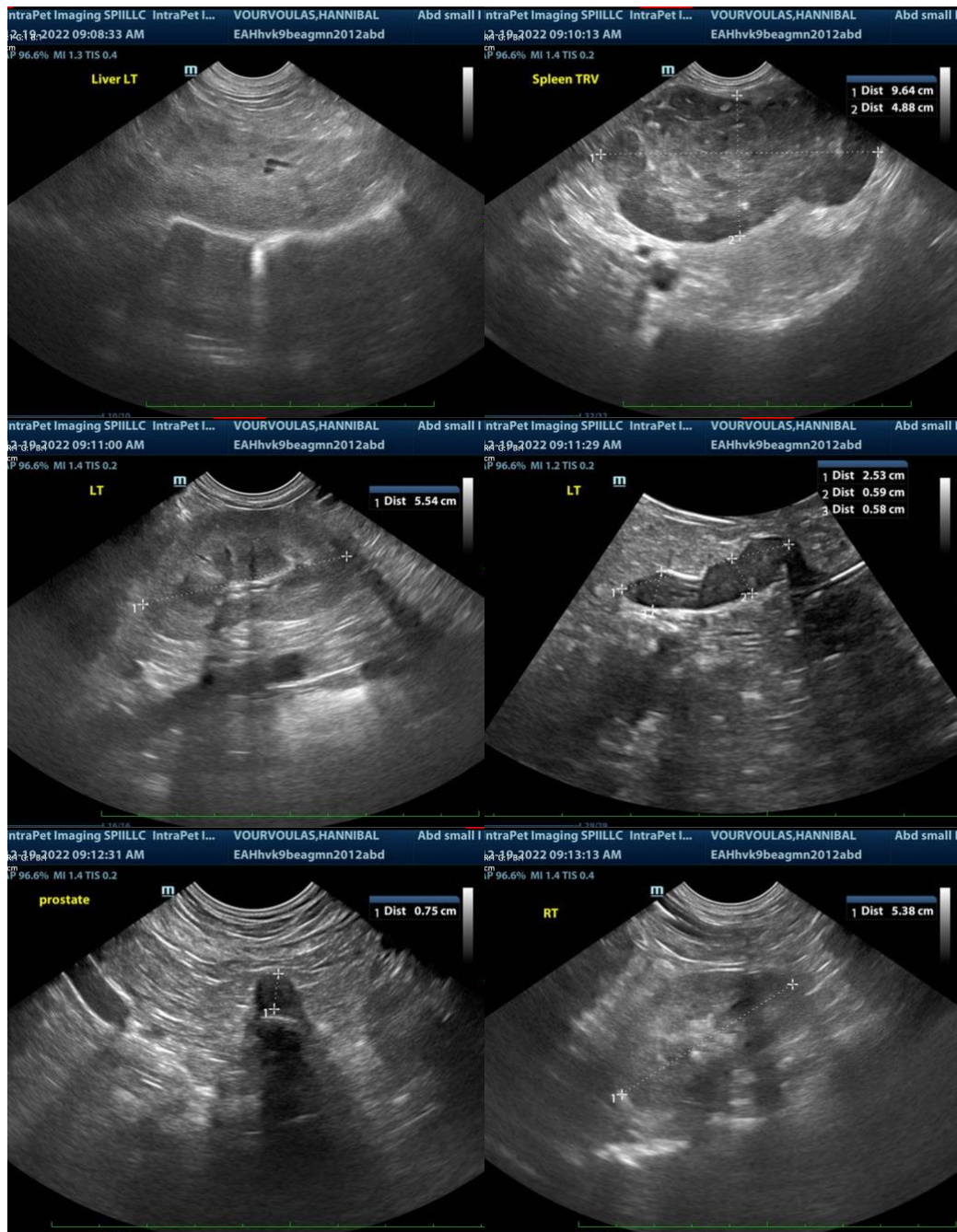
This patient's reported clinical complaint of gagging may or may not be related to the pathology present in these images. Differentials for gagging unrelated could include mild or early laryngeal paralysis and/or potentially gagging secondary to polydipsia related to the reported Cushing's disease or even potentially G.E.R.D. Therefore, empirical therapies, in addition to treating the hyperadrenocorticism, could include antacid therapy.

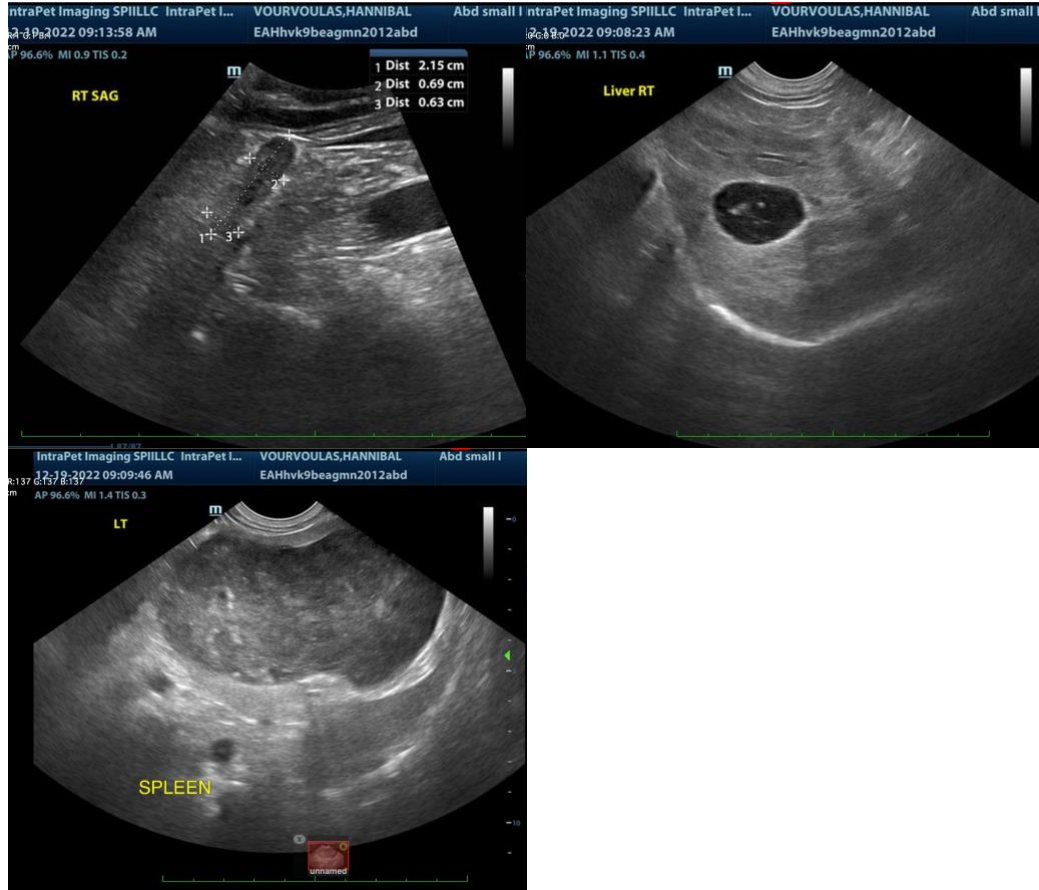
Given the pathology present in these images, additional recommendations include three view thoracic

radiographs are recommended for further assessment of cardio-pulmonary status as well as to further evaluate for any evidence of metastatic disease, if not recently evaluated.

An echocardiogram is recommended for further evaluation of heart base area.

A fine needle aspirate of the splenic mass could be considered if patient coagulation status is appropriate or alternatively, given the risk of hemorrhage, etc., with even benign lesions, an exploratory laparotomy for planned splenectomy could be pursued.





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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