

**DATE**

12/7/21

**PRESENTING CLINICAL SIGNS**

History: R anal sac mass about 5-7 mm discovered on anal sac expression. Remaining PE WNL no clinical signs.

Lab Results: Blood chemistry and CBC to be performed the morning of AUS.

Date of Previous IntraPet Ultrasound: No previous IntraPet scans.

Sedation: Not required for a full diagnostic ultrasound.

Stat Report: Not requested.

**PATIENT**

Gizmo Balsamo

**SPECIES**

Canine

**BREED**

Jack Russell Terrier  
Mix

**SEX**

Neutered male

**AGE**

7/29/10

**WEIGHT**

15.2 kbs

**INTERPRETED BY**

Kathleen Sennello  
DVM, MS, Diplomate  
ACVIM (Small Animal  
Internal Medicine)

**IMAGING PERFORMED BY**

Stephanie Pearce  
RDCS, RVT

**HOSPITAL NAME**

Pleasantville AH

**REFERRING VET**

Dr. Gounaris

**INVOICE**

94352

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

The urinary bladder is minimally distended with anechoic urine. The bladder wall, trigone, ureteral papillae and visible urethra (to a depth of 2cm) appear normal with no evidence of wall thickening, mucosal irregularities, masses or cystic calculi. The bladder wall measured 0.3 cm. Evaluation of the urinary bladder is incomplete due to lack of urinary distension.

The prostate is normal and measures 0.83 cm.

The left kidney has a normal shape and size (4.06 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The right kidney has a normal shape and size (4.33 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

**Adrenal Glands**

The left adrenal gland is normal in size measuring 0.43 cm at the caudal pole It is observed in its normal position cranial to the left renal artery. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

The right adrenal gland is normal in size measuring 0.59 cm at the caudal pole It is observed in its normal position between the cranial aspect of the right kidney and the caudal vena cava. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

**Spleen**

The spleen is subjectively normal in size, echotexture is homogenous, and the splenic capsule is smooth with no irregularities. The blood flow through the hilus and splenic parenchyma appears normal. No focal parenchymal abnormalities are visualized.

**Liver**

The liver is subjectively normal in size, and echogenicity with smooth peripheral margins. The parenchyma is heterogenous in echotexture with subtle, indistinct focal mottling. The visible portions of the vasculature and biliary tract appear normal. A hypoechoic nodule was visualized on the left side and measured 0.59 cm. The gallbladder lumen is moderately distended. The wall of the gallbladder is not thickened and has a smooth mucosal surface. There is a moderate amount of non-organized echogenic debris. The cystic and common bile ducts are normal/not visible.

### ***Gastrointestinal***

The stomach contains minimal luminal contents. It measures at a normal thickness of <0.7cm with some variability due to the presence of rugal folds. The distinction of the gastric wall layers is adequate and there is no impression of reduced peristaltic activity. No masses or focal lesions were observed.

The visualized areas of duodenum, jejunum and ileum have a relatively uniform diameter with minimal fluid distension. Wall thickness is normal. Bowel loops follow a curvilinear path with distinct wall layering maintaining the typical 1:3 muscularis:mucosa layer ratio. The duodenum measured as normal and the jejunum measured as normal (0.32 cm). Visualized peristalsis appears appropriate. There were no focal lesions consistent with obstruction or a mass effect observed.

The ileocecal junction was visualized and exhibited normal intact wall layering and is subjectively of normal thickness. Sections of colon are visualized with formed fecal material and gas shadowing distally. There is no observed focal or generalized colon wall thickening or loss of layering.

### ***Pancreas***

The pancreas is normal and isoechoic to surrounding mesentery. There is no evidence of nodules or cystic lesions. There is no evidence of regional mesenteric inflammation or fluid.

### ***Free Abdomen***

Evaluation of the peritoneal cavity did not reveal any evidence of effusion, or subjective lymphadenomegaly. The Medial iliac nodes appear normal and there was no evidence of a caudal aortic thrombus at the bifurcation. The omentum is of normal uniform echogenicity.

## **ULTRASONOGRAPHIC FINDINGS**

### **PRIMARY FINDINGS:**

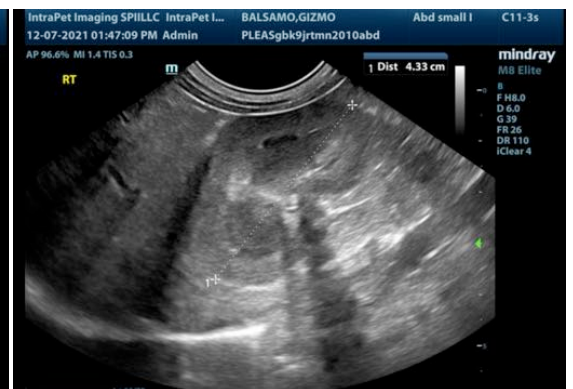
- Large heterogenous liver with a small hypoechoic nodule on the left side. The diffuse hepatic changes are non-specific and could be consistent with vacuolar hepatopathy, nodular hyperplasia, inflammatory/immune-mediated disease, fibrosis, extramedullary hematopoiesis, toxic hepatopathy (e.g., copper), infiltrative neoplasia (less likely) or other hepatopathy.
- Moderate gallbladder debris. The significance of the aggregated gallbladder debris is unclear. This could represent an early mucocele, cholestasis, or may be secondary to fasting.

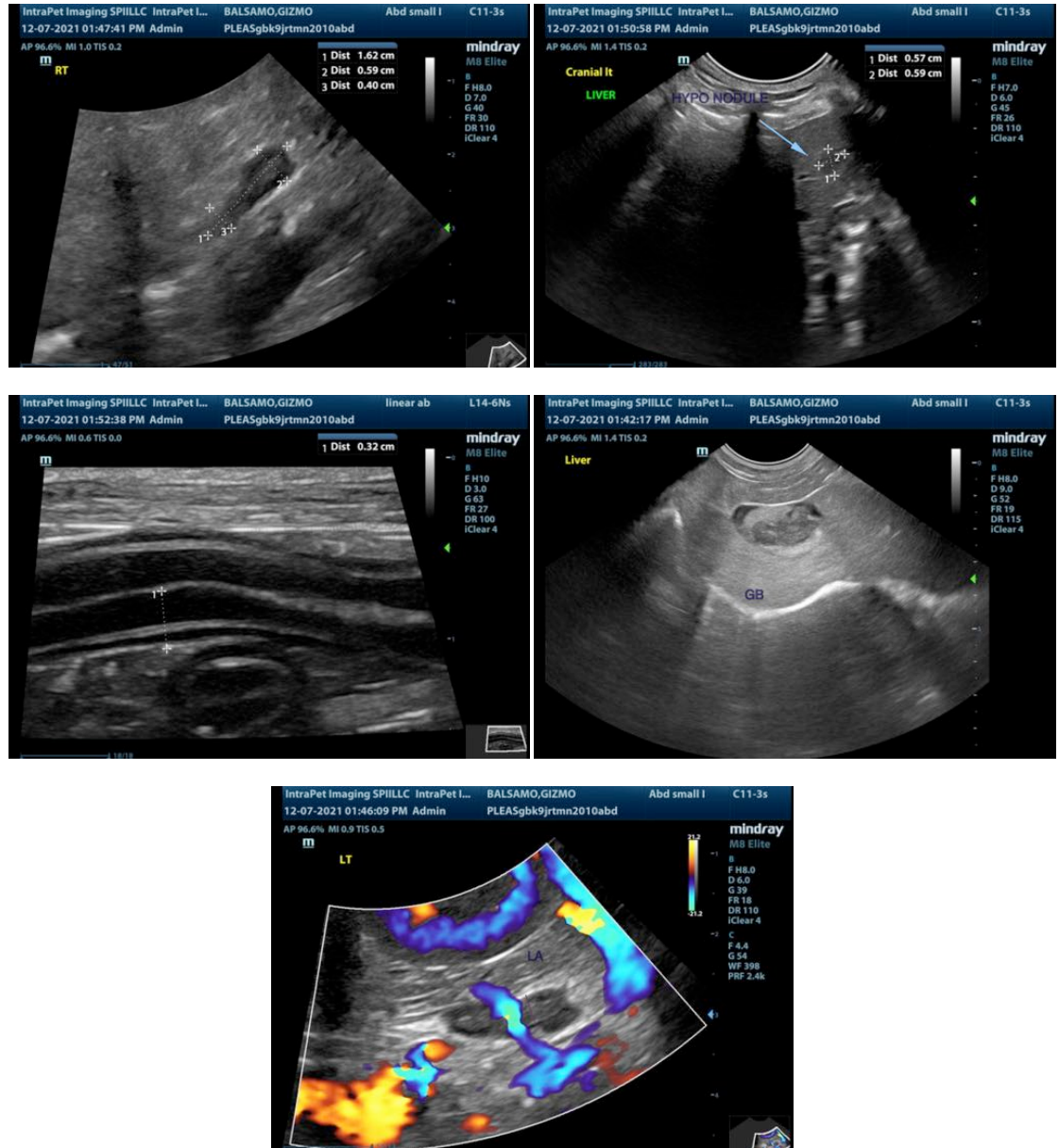
### **INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

No lesions highly suspicious of metastasis from an anal gland carcinoma were visualized. There is a small, hypoechoic nodule in the liver which could represent a metastatic lesion, but more likely its appearance favors a more benign lesion. This area should be monitored with ultrasound for change and a FNA considered.

Additionally the gallbladder has a lot of sludge visualized within it. There is no overt gallbladder wall thickening or inflammation surrounding the gallbladder. Lab work included in the history does note an ALP elevation. You can consider Ursodiol therapy and continued monitoring with ultrasound.

Additionally, blood work submitted has an elevated serum calcium level. I recommend an ionized calcium to see if this is confirmed. If ionized calcium is elevated I suspect a hypercalcemia malignancy, but consider PTH and PTHrP levels to further evaluate this abnormality.





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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