

**DATE**

9/28/21

**PRESENTING CLINICAL SIGNS**

History: Possible splenic / liver mass.  
Current Medications: Not provided by the veterinarian.  
Lab Results: Attached separately. Specifics not provided by the veterinarian.  
Radiographs: Not provided by the veterinarian.  
Date of Previous IntraPet Ultrasound: No previous IntraPet scans.  
Sedation: Sedation not required for scan.  
Stat Report: STAT report not requested by the veterinarian.

**PATIENT**

Apollo Bente

**SPECIES**

Canine

**BREED**

German Shepherd

**SEX**

Neutered male

**AGE**

4/30/11

**WEIGHT**

117 lbs

**INTERPRETED BY**

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

**HOSPITAL NAME**

Animal Medical Center  
of Bel Air

**REFERRING VET**

Dr. Chaudhry

**INVOICE**

92045

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

The urinary bladder is moderately 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 prostate is large in size and measured 5.78 cm. It has a fairly regular shape with smooth, external margins. The parenchyma is heterogenous with occasional, small cystic lesions. The prostatic urethra appears normal with no evidence of irregularity, invasion, mass effect or calculi.

The left kidney has a normal shape and size (7.75 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 (8.23 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 region of the left adrenal (between right cranial kidney and vena cava) is unremarkable, but the adrenal is not distinctly visualized. No evidence of a mass effect.

The region of the right adrenal (between right cranial kidney and vena cava) is unremarkable, but the adrenal is not distinctly visualized. No evidence of a mass effect.

**Spleen**

The spleen is subjectively normal in size. The spleen echotexture is heterogenous and mottled, the splenic capsule is irregular with numerous focal nodules. The nodules measured 3.11 cm, 3.5 cm, 2.96 x 3.12 cm, 2.7 cm and 3.7 cm. The blood flow through the hilus and splenic parenchyma appears normal. The spleen is highly irregular with clusters of isoechoic to hypoechoic nodules/mass effects measuring 2.2 cm, 3.16 cm and a larger mass measuring 4.2 x 3.57 cm.

**Liver**

The liver is subjectively normal in size, and echogenicity with irregular, nodular margins. The parenchyma is heterogenous in echotexture with subtle, indistinct focal mottling. The visible portions of the vasculature and biliary tract appear normal. There are numerous, isoechoic mass effects within the hepatic parenchyma causing clusters with mucosal bulging. The gallbladder lumen is moderately distended. The wall of the

gallbladder is not thickened and has a smooth mucosal surface. Luminal contents are primarily anechoic. 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 (between 0.3-0.5cm in wall thickness) and the jejunum measured as normal (between 0.2-0.47cm.) 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**

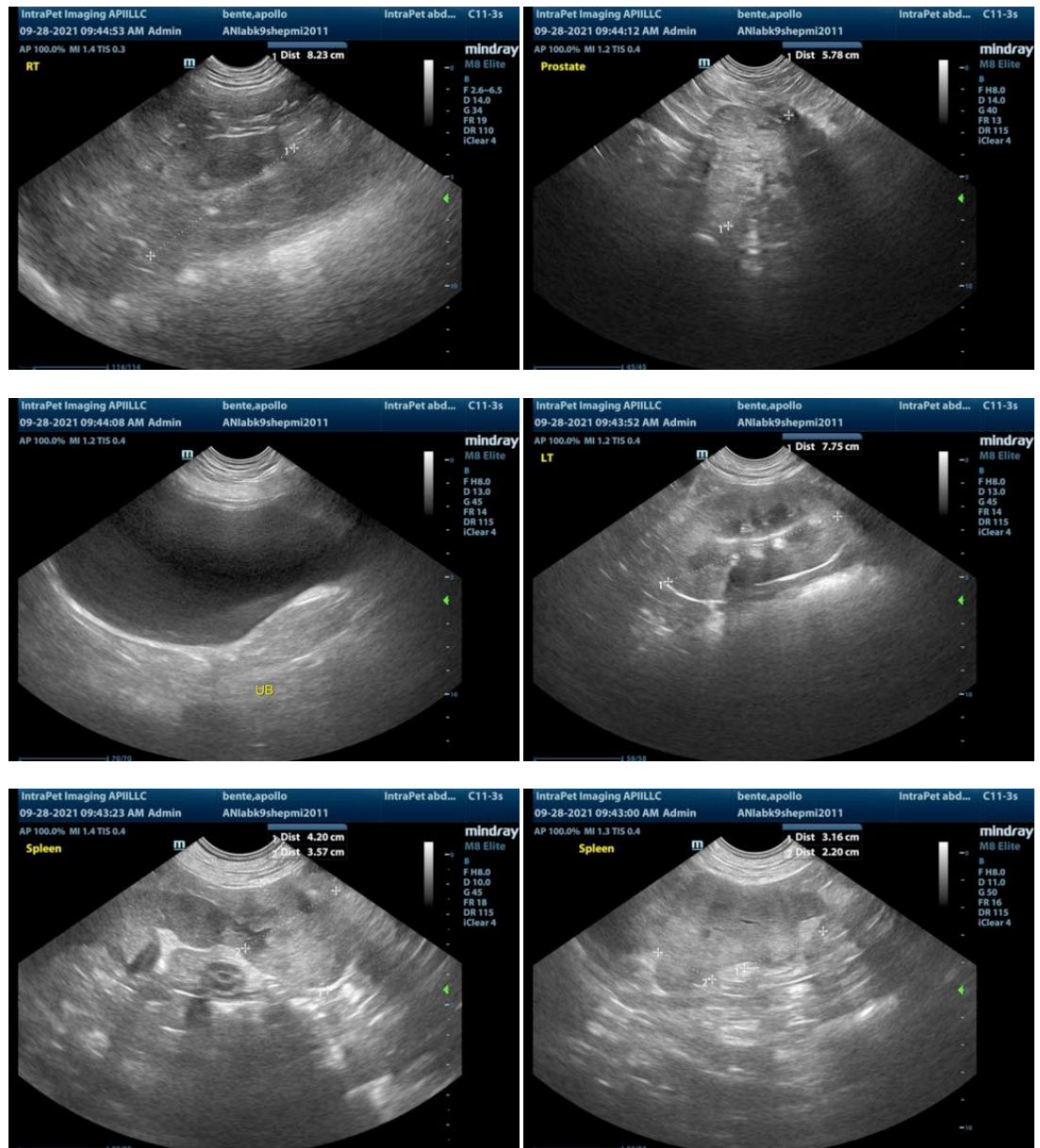
### **PRIMARY FINDINGS:**

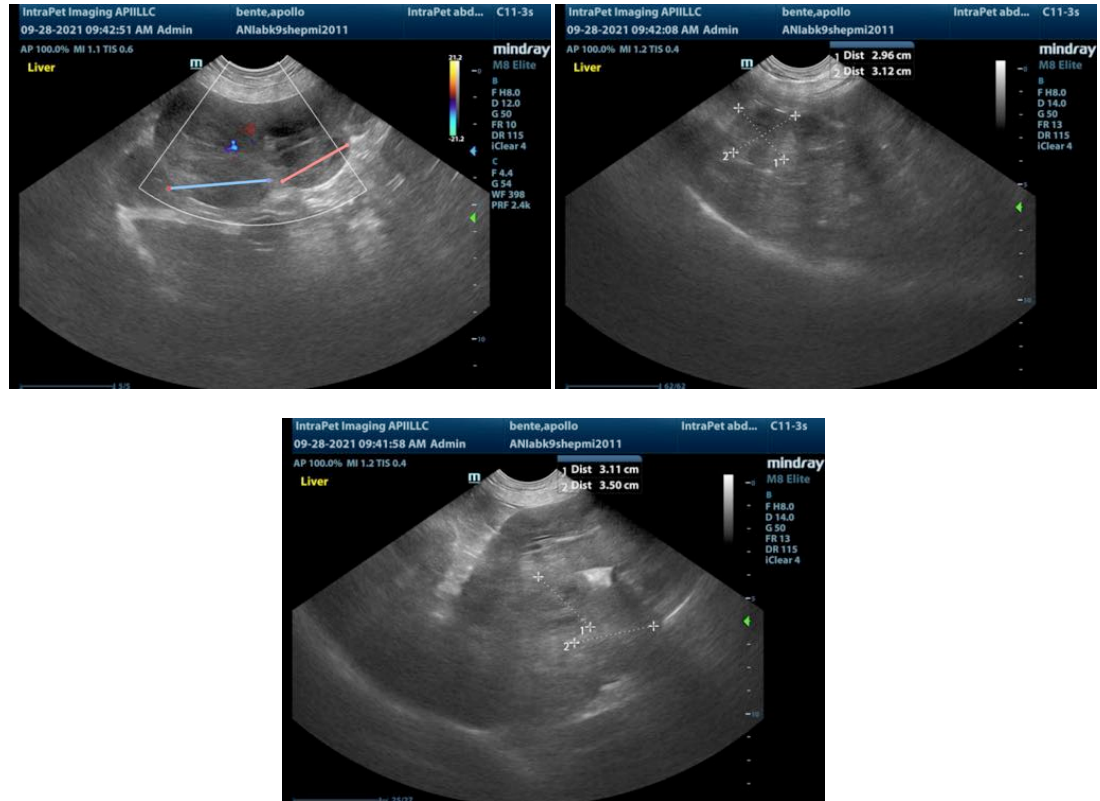
- Numerous isoechoic hepatic masses with very irregular margins. The findings are concerning for a neoplastic process considering the adjacent splenic lesions, but cytology or histopathology would be necessary to confirm.
- Mottled, irregular spleen with numerous focal nodules/mass effects.
- Numerous nodules and mass are distorting the splenic capsule. The most likely differentials include neoplasia (hemangiosarcoma, hemangioma, mast cell tumor, histiocytic disease) although hematoma, abscess and other are possible.
- Large, hyperechoic, mildly cystic prostate.

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

The findings in the liver and spleen are concern for a possible neoplastic process. The lesions are relatively isoechoic and not cavitated. If these are indeed neoplastic this would be consistent with metastatic disease. I recommend FNA of the liver and spleen. If this is not diagnostic then consider splenectomy with histopathology and liver biopsy. I recommend three view thoracic radiographs.

Additionally the prostatic changes are most consistent with benign prostatic hypertrophy or prostatitis. Consider urinalysis and culture along with neutering in the near future.





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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