

**DATE PRESENTING CLINICAL SIGNS**

1/10/2022

History: Patient has historical murmur grade 4/6 PMI mitral - owners have declined cardiac workup in past - recently presented to ER for suspected cardiac failure. Doing well since then. BP: 190 mmHG. Murmur: Grade 4/6 PMI mitral.

**PATIENT**

Chevy Eyring

Current Medications: Pimobendan 5 mg (1 PO SID), Furosemide 20 mg (2 tablets BID), Denamarin 120 mg (1 tablet SID).

**SPECIES**

Canine

Radiographs: Radiographs: At ER - Patchy alveolar pattern with enlarged heart. Radiographs: Repeated at PHAH: Report pending.

**BREED**

Beagle Mix

Date of Previous IntraPet Ultrasound: No previous IntraPet scans.

Sedation: Patient sedated with Gabapentin & Trazadone.

Stat Report: Not requested.

Imaging Performed By: Andi Parkinson, RDMS.

**SEX**

Male, neutered

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

The urinary bladder, trigone, and pelvic urethra are normal in thickness and the mucosal surface is smooth. The bladder lumen is moderately distended with mostly anechoic urine. No masses, inflammatory changes or calculi are observed. Ureteral papillae and visualized portion of the proximal urethra, visible to a depth of 2 cm, are normal.

**AGE**

10/5/2008

**WEIGHT**

38 lbs.

The prostate is normal in size (1.21 cm in width) and shape. Parenchyma is homogenous. The prostatic urethra appears normal without evidence of dilation or obstruction.

**INTERPRETED BY**

Andrea Nicastro, DVM,  
Diplomate ACVIM  
(Small Animal Internal  
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The left kidney is normal size (5.73 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with mild loss of corticomedullary distinction. Hyperechoic shadowing diverticular foci are visualized. There is no evidence of pyelectasia, nephroliths, infarcts or hydronephrosis. Renal vasculature is normal.

**HOSPITAL NAME**

Perry Hall AH

The right kidney is normal in size (6.46 cm in length) with a normal shape, smooth peripheral margins and normal internal architecture. There is mild to moderate loss of corticomedullary distinction. Pinpoint hyperechoic foci are observed within the cortex. Several hyperechoic shadowing diverticular foci are observed. There is no evidence of pyelectasia, infarcts or hydronephrosis. Renal vasculature is normal.

**Adrenal Glands****REFERRING VET**

Dr. Miller

The left adrenal gland is mildly enlarged (0.61 cm at cranial pole) (0.73 cm at caudal pole) (2.87 cm in length); normal shape; homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

**INVOICE**

12826

The right adrenal gland is normal size (0.91 cm at cranial pole) (0.54 cm at caudal pole) (2.66 cm in length); normal shape; homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

### ***Spleen***

A 2.16 x 1.64 cm isoechoic to slightly heterogeneous, vascular nodule/mass is observed at the caudal aspect. The lesion causes capsular expansion. In the remainder of the spleen the margins are curvilinear and the parenchyma is homogeneous. Splenic vasculature is normal with no evidence of thrombosis.

### ***Liver***

The liver is subjectively enlarged with slightly swollen peripheral contours. The parenchyma is hyperechoic relative to the spleen with numerous varying sized ill-defined hypoechoic nodules/areas throughout the organ. A 1.04 cm irregular cystic structure is observed on the left side. Vascular and biliary tracts are of normal volume with no evidence of congestion. The gall bladder lumen is moderately distended. The wall is thin and smooth. An excessive amount of aggregated echogenic sludge, some of which is partially dependent and some of which is stranding is observed within the lumen. The cystic and common bile ducts are normal/not seen.

### ***Gastrointestinal***

The stomach and intestine are free of stasis and exhibit normal peristaltic activity. The gastric lumen is not distended. The gastric wall and pylorus are normal in thickness with a normal layering pattern. The pyloric outflow tract is patent. The small intestinal lumen is not dilated. The small intestinal wall thickness is normal with a normal layering pattern and appropriate mural detail. Discreet masses are not identified. The colonic wall is normal. No obstructive disease is noted.

### ***Pancreas***

The right limb of the pancreas is visible with normal curvilinear peripheral contours. The parenchyma is largely isoechoic relative to surrounding omental fat and slightly mottled in appearance. The pancreatic duct is visible but not overtly dilated. There is no evidence of peripancreatic inflammation or effusion.

### ***Free Abdomen***

The peritoneal cavity is normal. There is no evidence of inflammation or effusion. The abdominal lymph nodes are normal/not visible.

### ***Other***

A brief echocardiogram reveals no evidence of pericardial effusion or obvious right atrial/auricular mass.

## **ULTRASONOGRAPHIC FINDINGS**

### **Primary Findings:**

- Splenic nodule/mass. Differentials include neoplasia (i.e., sarcoma, round cell tumor) or benign pathology (i.e., a focus of lymphoid hyperplasia, extramedullary hematopoiesis or a granuloma).
- The diffuse hepatic nodules could be consistent with infiltrative neoplasia (i.e., round cell tumor). Alternatively, a benign age-related process (i.e., regenerative nodular hyperplasia, vacuolar hepatopathy) or multifocal inflammatory disease are other possible differentials.
- Excessive gallbladder sludge. Differentials include cholestasis, early mucocele formation, secondary to fasting.

### **Secondary Findings:**

- Bilateral age-related renal and pancreatic changes.
- Borderline left adrenomegaly.

### INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- Three-view thoracic radiographs are recommended (if not already performed) to assess for pulmonary metastatic disease.
- Consider fine needle aspirates of the liver and splenic mass (if clotting status is appropriate).
- Regarding the gallbladder, consider initiation of Ursodiol therapy. Alternatively consider a repeat ultrasound in 2-3 weeks, preferably 2 hours post-small meal. If gallbladder changes are similar to the current scan, Ursodiol initiation can be considered at that time.





**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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