

**DATE**

8/19/21

**PRESENTING CLINICAL SIGNS**

History: Generalized cachexic appearance, pot-bellied, PU/PD. Elevated kidney and liver enzymes.  
Current Medications: Clindamycin 300mg Capsules, Amoxicillin 500mg Caps  
Lab Results: Attached.  
Radiographs: N/A  
Date of Previous IntraPet Ultrasound: No previous  
Sedation: Not needed.  
Stat Report: Not requested.

**PATIENT**

Shy Poplawski

**SPECIES**

Canine

**BREED**

German Shepherd

**SEX**

Spayed Female

**AGE**

2010

**WEIGHT**

74 lbs

**INTERPRETED BY**

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

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**HOSPITAL NAME**

Bayside Animal  
Medical Center

**REFERRING VET**

Dr. Bray

**INVOICE**

91367

**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 left kidney has a normal size (6.42 cm) and an irregular shape. Overall echogenicity is slightly hyperechoic with poor corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. Pyelectasia was noted and measured 0.68 cm. There is no evidence of nephroliths or hydroureter. Renal vasculature is normal. The regular shape reported is likely due to previous infarcts.

The right kidney has a normal size (5.92 cm) and irregular shape. Overall echogenicity is slightly hyperechoic with poor corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. Non-obstructive nephroliths and pyelectasia measuring 0.32 cm were noted. There is no evidence of hydroureter. Renal vasculature is normal. The regular shape reported is likely due to previous infarcts.

**Adrenal Glands**

The left adrenal gland is normal/large in size measuring 1.11 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 /borderline enlarged in size measuring 1.0 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. The spleen echotexture is heterogenous and mottled, the splenic capsule is smooth with no irregularities. The blood flow through the hilus and splenic parenchyma appears normal. There are numerous hyperechoic nodules/foci that measured 1.0 cm and 1.2 cm. These do not disrupt the capsule and are most consistent with benign myelolipomas.

**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. There is a 4.3 x 5.34 cm, ill-defined mass effect on the right side of the liver. The gallbladder is significantly distended with primarily fluid material. The wall of the gallbladder is irregular and focally thickened in areas with surrounding inflammation visible, but no free fluid is evident.

### ***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 (0.37 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.

### ***Heart***

A brief view of the heart was submitted. No pericardial effusion was seen.

## **ULTRASONOGRAPHIC FINDINGS**

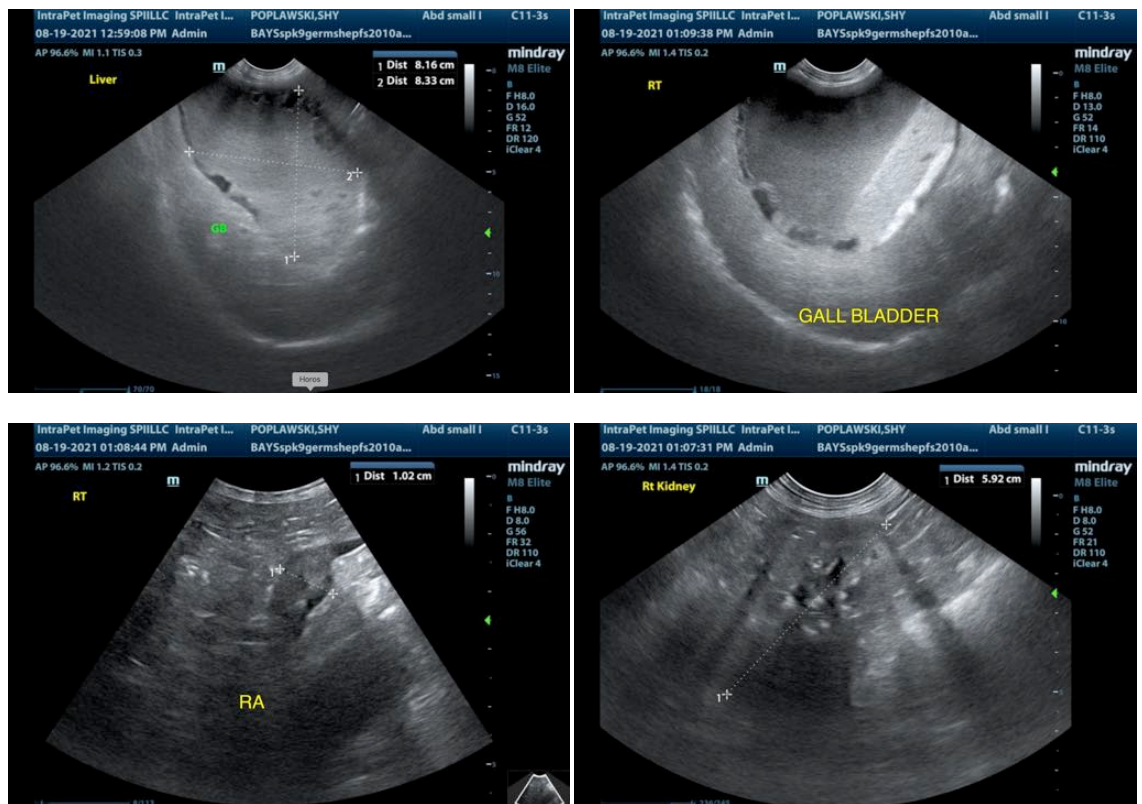
### **PRIMARY FINDINGS:**

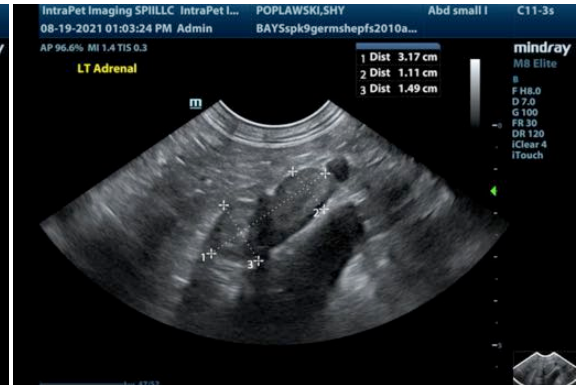
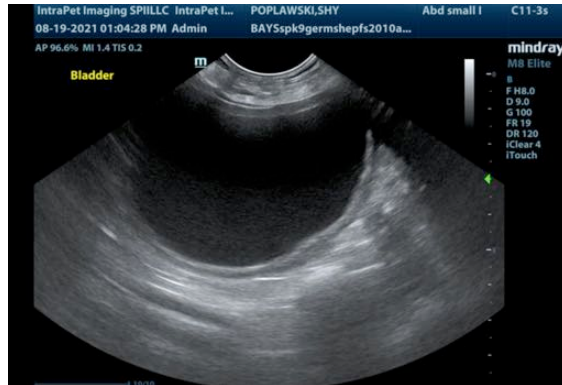
- Large distended gallbladder with irregular thickened wall and surrounding inflammation. The findings are most consistent with cholecystitis.
- Heterogenous liver with right-sided hepatic mass. Heterogenous liver.
- Borderline bilateral adrenomegaly. The bilateral adrenomegaly could be consistent with bilateral hyperplasia (e.g., secondary to pituitary-dependent hyperadrenocorticism), bilateral infiltrative neoplasia, inflammatory adrenal disease, other. Correlation with clinical findings is recommended.
- Loss of corticomedullary distinction in both kidneys with mild pyelectasia. Mild loss of corticomedullary distinction in both kidneys could be consistent with chronic degenerative disease or interstitial nephrosis. Pyelectasia of the left/right kidney could be consistent with pyelonephritis, chronic renal disease, secondary to PU/PD or fluid therapy (if applicable), other.

## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

I would not be surprised if the patient does not have pituitary dependent hyperadrenocorticism as the adrenal glands are plump, but unfortunately I am also concerned about the liver mass visualized and her abnormal gallbladder. Consider medical treatment for cholecystitis with antibiotics, Ursodiol and close monitoring. If surgery is something that the owners would consider I would recommend a CT scan of the liver to assess the mass effect for preoperative planning and at that time evaluate the gallbladder as well to determine if it should be removed. If medical management results in improvement the gallbladder may not need to be removed, but in my experience even with successful medical management it will always need to be monitored for flare-ups and if medical management is not successful there is risk for possible rupture, but it is difficult to assess lab work changes in light of the hepatic mass and possible Cushing's disease contributing to the ALP elevation as well. I recommend three view thoracic radiographs.

The ultrasonographic changes in the kidneys are consistent with the azotemia reported. This is likely chronic progressive renal disease. I recommend blood pressure, urinalysis and culture.





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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