

**DATE PRESENTING CLINICAL SIGNS**

4/4/23 Hx of GB mucocele on AUS, repeat AUS to monitor progression.

**PATIENT**

Penny Silverstein

Current Medications: Enalapril 5mg 1/4 tab BID, Vetmedin 1.25mg 1 tab PO q 12 hrs, Spironolactone 25mg 1/4 tab SID, Theophylline 25mg 3/4 tab q 12 hrs, Pepcid 10mg 1/4 BID, Ursodiol 50mg 1 sid, Metronidazole, Cerenia 16mg 1/2 SID, Apoquel 3.6mg PRN ( 1/2 tab SID), Metacam 0.2mL -- only as needed, Visbiome, Fish oil 0.25mL BID, Lasix 5mg SID, Cytopoint 10mg.

**SPECIES**

Canine

Lab Results: No significant changes since last AUS.  
Date of Previous IntraPet Ultrasound: 2/21/23. See attached.  
Sedation: Not required to complete full diagnostic ultrasound.  
Stat Report: Not requested.

**BREED**

Chihuahua

Imaging Performed By: Andi Parkinson, BS, RDMS.

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN****SEX**

Spayed Female

**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.

**AGE**

12/11/13

The left kidney has a normal shape and size (3.19 cm) with diffuse cortical cysts. Overall echogenicity is slightly hyperechoic with poor corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of focal perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

**WEIGHT**

7.25 Pounds

The right kidney has a normal shape and size (3.62 cm) and numerous small cortical cysts. Overall echogenicity is slightly hyperechoic with poor corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of focal perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

**INTERPRETED BY**

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

**Adrenal Glands**

The left adrenal gland is normal in size measuring 0.55 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.

**HOSPITAL NAME**

Timonium AH

The right adrenal gland is normal in size measuring 0.43 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.

**REFERRING VET**

Dr. McIntyre

**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.

**INVOICE**

46381

**Liver**

The liver is subjectively normal in size with smooth peripheral margins. The parenchyma is hyperechoic and homogenous in echotexture. The visible portions of the vasculature and biliary tract appear normal. There are diffuse ill-defined hypoechoic nodules throughout the parenchyma varying in size from 0.20-0.70 cm.

The gall bladder lumen is significantly distended. Some areas of the wall appear mildly thickened with adherent debris and some areas have early mucosal stranding and organization of the debris into an early

mucocele. There is a large amount of primarily non-organized echogenic debris present as well. There is no evidence of bile duct dilation. The gallbladder appears very similar to the previous scan performed 2/21/23.

### ***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. Jejunum wall measures 0.25 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 prominent and mottled compared to the surrounding isoechoic 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.

## **PRIMARY FINDINGS**

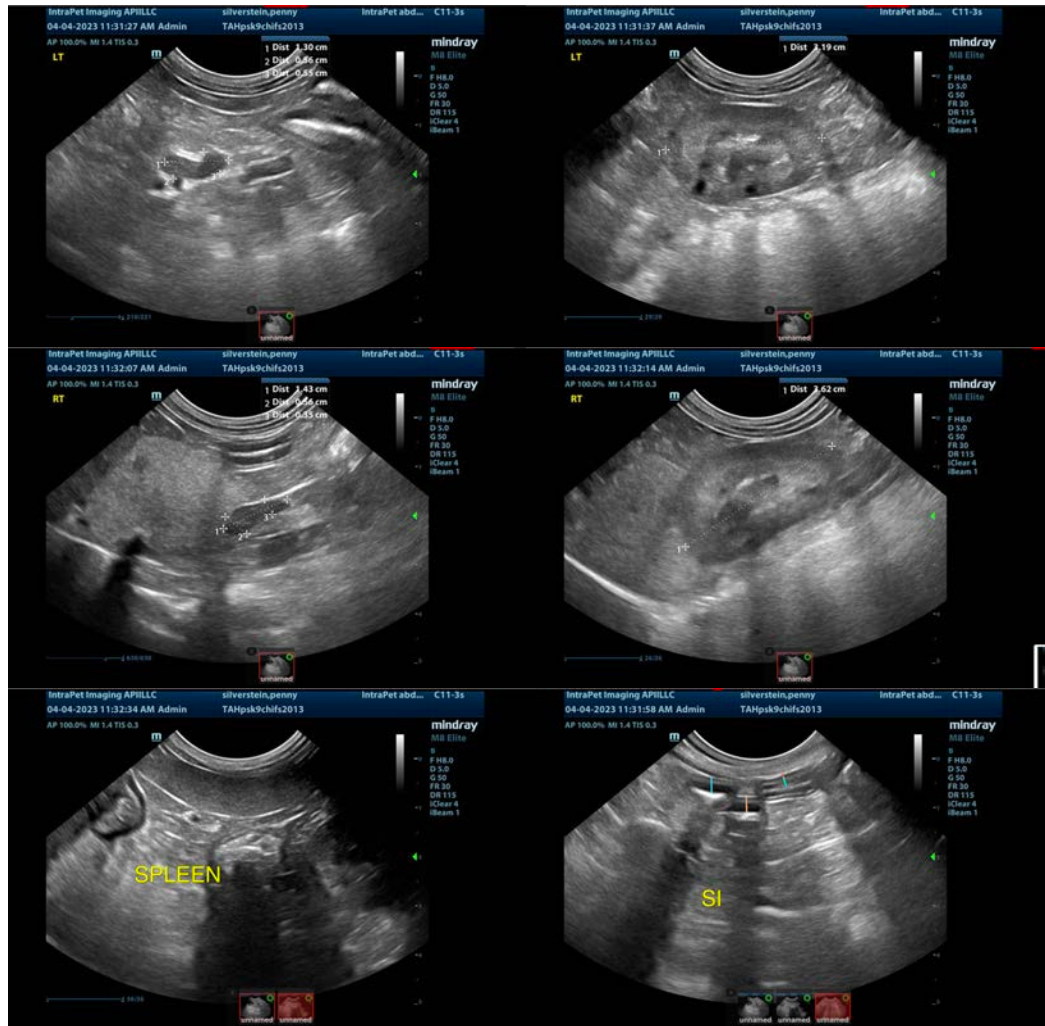
- Decreased corticomedullary distinction in both kidneys – The bilateral renal findings are consistent with age-related change.
- Hyperechoic liver with diffuse ill-defined hypoechoic nodules – The diffuse hepatic changes are non-specific and can be seen with vacuolar hepatopathy, reactive change, nodular hyperplasia or, less likely, inflammatory/immune-mediated disease, infiltrative neoplasia, or other hepatopathy. The nature of the hypoechoic nodules trends towards a benign lesion, but underlying neoplasia cannot be ruled out.
- Large, distended gallbladder with a large amount of hyperechoic debris and very mild early organization – The gall bladder changes are most consistent with a developing mucocele. Consider medical management and close monitoring for progression of this lesion. The gallbladder looks very similar to the previous scan performed on 2/21/23.

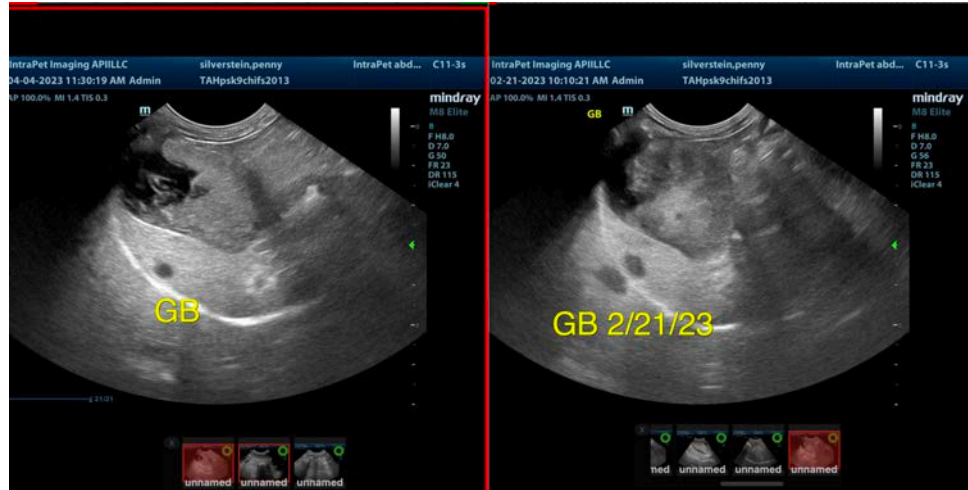
## **SECONDARY FINDINGS**

- Prominent, mildly mottled pancreas – The pancreatic changes are most consistent with age-related parenchymal remodeling, potentially secondary to a prior inflammatory episode, early fibrosis or chronic pancreatitis.

## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The gallbladder appears very similar to the previous scan. There is no significant progression of this lesion. Recommend continued medical management. If there are any symptoms associated with this lesion, I would recommend cholecystectomy. Alternately, you could consider close continued monitoring with lab work and monitoring of symptoms/ultrasound.





The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. 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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