

**DATE PRESENTING CLINICAL SIGNS**

4/7/22 Decreased appetite since mid-March- switched to Hill's C/D food. Initially loved it then appetite decreased again. Coughing for a few days, less active, less social. Vomited Tuesday 4/5/22.

**PATIENT**

Emma Gotsch

Current Medications: SQ fluids 4/5/22, Fortiflora, Renakare gel ½ tsp daily.

Lab Results: HCT 41.8%, EOS 0.11, K 2.9, BUN 24, Creat 1.3, FPL normal.

Radiographs: Mineralization in kidneys, left kidney larger, right kidney smaller, spleen appears enlarged.

Thorax- small soft tissue mass cranial to heart, dorsal elevation of trachea.

**SPECIES**

Feline

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: STAT Requested by DVM.

**BREED**

DSH

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

Spayed Female

**Urinary System**

The urinary bladder is moderately distended with mild primarily suspended echogenic debris present. 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 calculi. Echogenic debris of this type can be associated with small crystals, cellular debris and proteinaceous debris.

**AGE**

4/1/07

The left kidney has a normal shape and size (3.88 cm) with non-obstructive nephroliths. 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. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

**WEIGHT**

9.1 Pounds

The right kidney has a normal shape and size (3.81 cm) with non-obstructive nephroliths. 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. 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 0.39 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.

**IMAGING PERFORMED BY**

Rachel Brilhart RDMS

The right adrenal gland is normal in size measuring 0.30 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.

**HOSPITAL NAME**

Jacksonville VH

**Spleen**

The spleen is borderline large in size (1.3 cm in width at the level of the hilus), 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.

**REFERRING VET**

Dr. Burk

**Liver**

The liver is subjectively normal in size, and echogenicity with smooth peripheral margins. The parenchyma is homogenous echotexture. The visible portions of the vasculature and biliary tract appear normal. No focal nodules or cystic lesions are observed.

**INVOICE**

36765

The gallbladder lumen is moderately distended. The wall of the gall bladder is not thickened and has a smooth mucosal surface. Luminal contents are primarily anechoic. The bile duct appears mildly dilated at 0.15 cm and tortuous. No obstruction is visualized.

### ***Gastrointestinal***

The stomach contains minimal luminal contents. It measures at a normal thickness of <0.36cm 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 measured 0.20 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. There is no diffuse lymphadenopathy visualized, but an enlarged colonic lymph node measures 0.57 cm x 0.49 cm. The omentum is of normal echogenicity.

### ***Other***

There is a small to moderate amount of pericardial effusion visualized.

Imaging of the right thorax reveals soft tissue structures suggestive of mass effects. Recommend cardiac ultrasound and 3-view chest radiographs.

## **PRIMARY FINDINGS**

- Echogenic debris within the urinary bladder – The echogenic debris in the bladder lumen could be consistent with cells, crystals, and/or mucus.
- Borderline large spleen – No focal lesions are visualized. This could be due to congestion. A fine needle aspirate could be considered.
- Pericardial effusion – Recommend cardiac ultrasound.
- Soft tissue density visualized in the right side of the thorax – most concerning for pulmonary masses. Recommend 3-view thoracic radiographs.

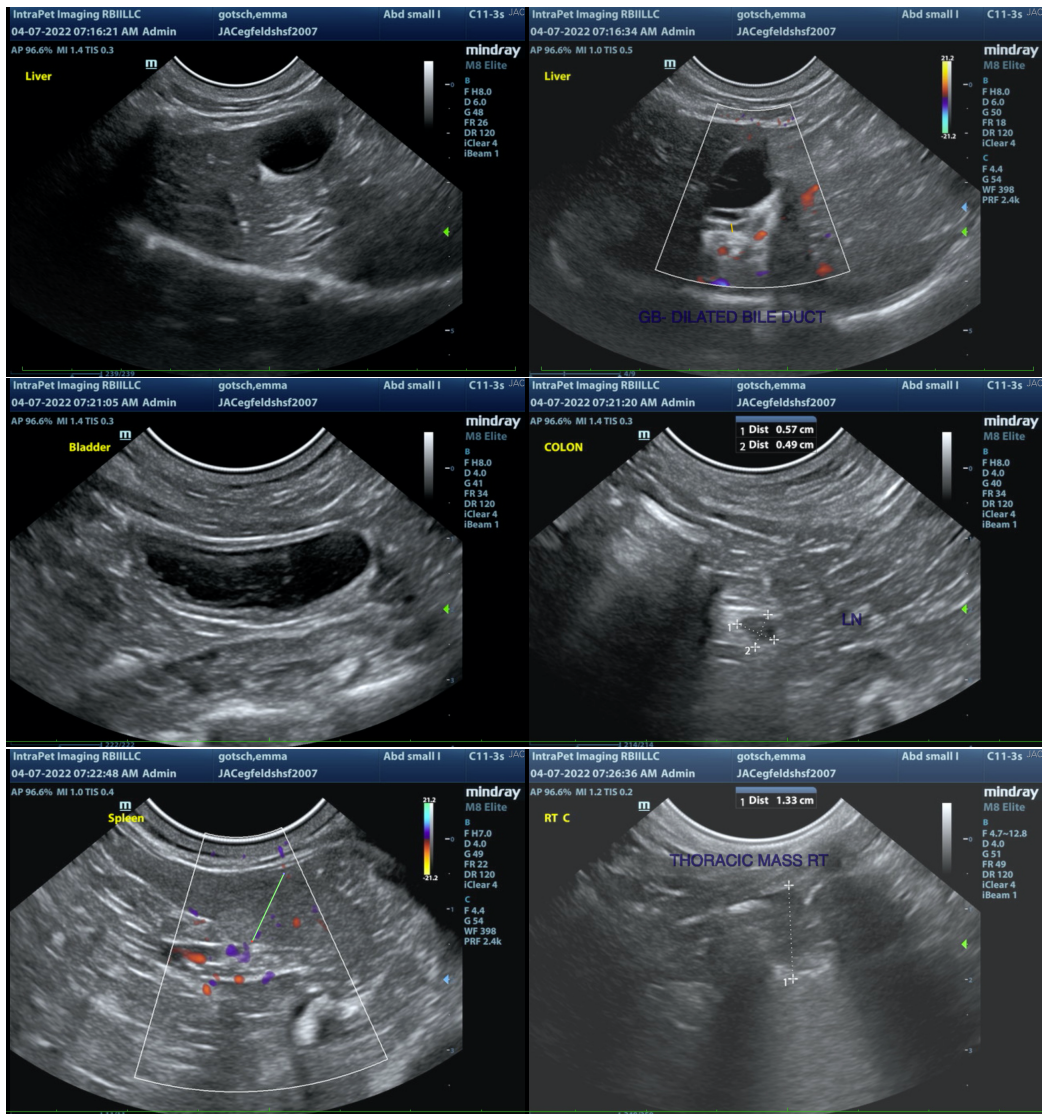
## **SECONDARY FINDINGS**

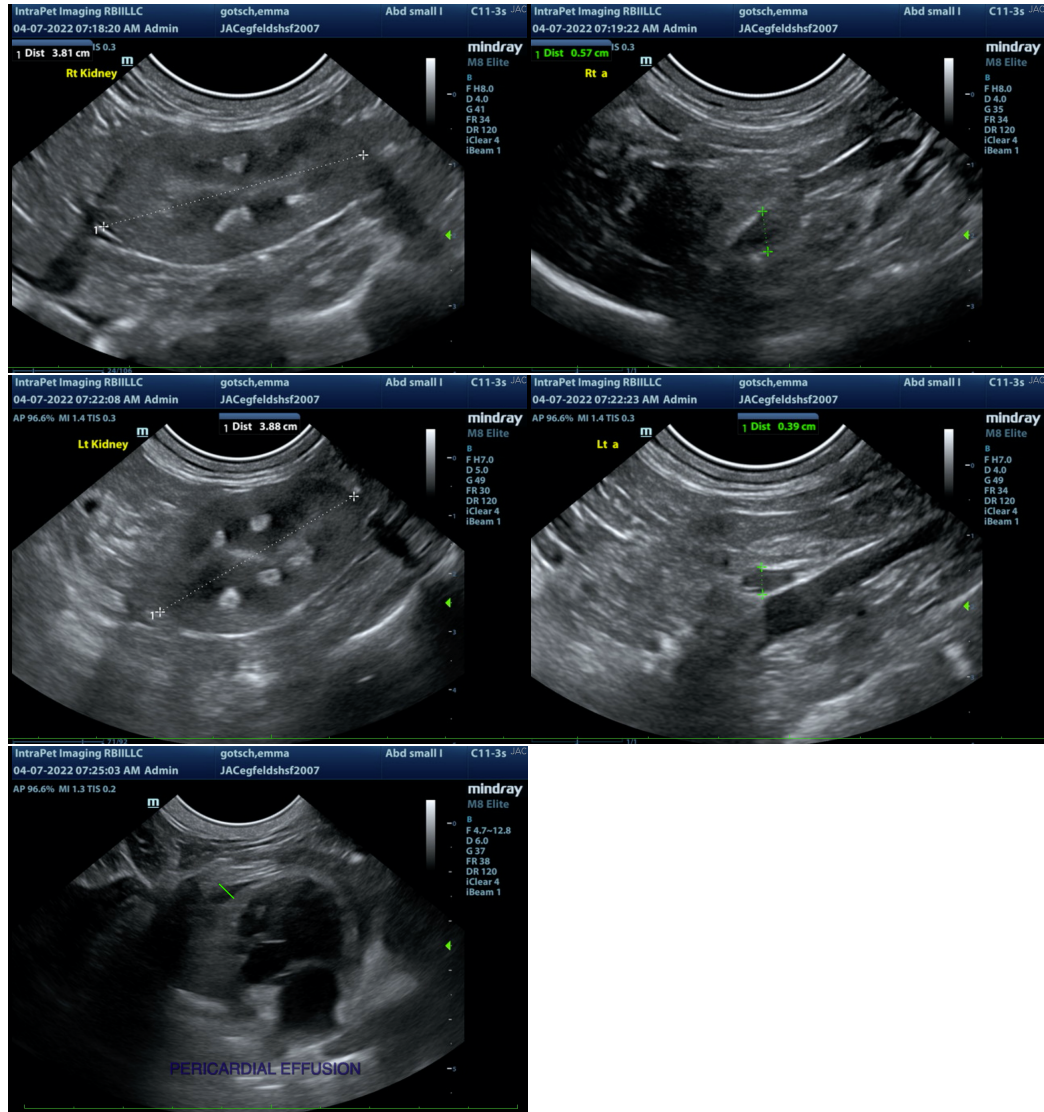
- Decreased corticomedullary distinction in both kidneys with non-obstructive nephroliths – The bilateral renal findings are consistent with age-related change. The hyperechoic mineralized foci observed at the corticomedullary junction of the left/right kidney are consistent with small, non-obstructive nephroliths.
- Mildly dilated, tortuous bile duct – If liver enzyme values are normal, this is likely an incidental finding.

## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Most of the findings observed on today's abdominal scan were relatively mild and could be considered age related. Recommend a urinalysis and culture and blood pressure evaluation. A fine needle aspirate of the spleen could be considered, but the enlargement could be due to secondary congestion due to the pericardial effusion.

Of bigger concern are the intrathoracic findings. Recommend cardiac ultrasound and thoracic radiographs.





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.

Kathleen Sennello DVM,MS, Diplomate ACVIM (Small animal Internal Medicine)  
 kathleen.sennello@sonopath.com