

**DATE**

6/23/22

**PRESENTING CLINICAL SIGNS**

Anorexic.

Current Medications: Mirtazipam.

Lab Results: See attached.

**PATIENT**

Benjamin Meyer

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

Imaging Performed By: Rachel Brillhart, RDMS.

**SPECIES**

Feline

**BREED**

Maine Coon

**SEX**

Neutered male

**AGE**

6/15/18

**WEIGHT**

10 lbs

**INTERPRETED BY**Beth Johnson, DVM  
DACVIM**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN****Urinary System**

Urinary bladder is adequately distended. It has a normal uniform wall thickness. Contents include primarily anechoic fluid with occasional echogenic non-shadowing debris, most consistent with incidental suspended lipid in a cat, possibly combined with exfoliated cells, mucous and/or small blood clots. Both sterile inflammation as well as urinary tract infection can also present with echogenic debris. No masses or cystoliths are observed. The trigone and visible pelvic urethra are normal in thickness with a smooth mucosal surface.

Left kidney is normal is size (3.84 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed.

Right kidney is normal is size (4.19 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed.

**Adrenal Glands**

Left adrenal gland is normal in size (0.35 cm), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal. There are enlarged lymph nodes in the area and an enlarged adrenal gland versus node cannot be definitively distinguished.

Right adrenal gland is normal in size (0.5 cm), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

**HOSPITAL NAME**

Glen Burnie AH

**Spleen**

Spleen is subjectively large in size with subtly scalloped or undulating capsular contour. Parenchyma is normal in echogenicity with a mildly coarse/heterogenous echotexture. No focal nodules or masses are observed. Splenic vasculature appears normal.

**REFERRING VET**

Dr. Shah

**INVOICE**

31204

**Liver**

Liver is subjectively normal in size with normal smooth curvilinear peripheral contour. Parenchyma is appropriately hypoechoic to the spleen in echogenicity and appropriately mildly coarse and homogenous in echotexture. No focal lesions are observed. Visible vasculature and biliary tree appear normal without distension or congestion.

Gallbladder is non-distended in size. The wall is smooth without visible thickening. Luminal contents are primarily anechoic. There is no evidence of cystic or common bile duct dilation.

### ***Gastrointestinal***

The visible stomach wall is normal in thickness and layering. The lumen of the stomach is empty with no evidence of obstruction, foreign material or infiltrative disease. Pyloric outflow tract appears patent.

The visible small intestine demonstrates areas of thick muscularis layer relative to mucosa (disruption of the normal 1:3 muscularis:mucosa ratio). Small intestinal submucosa is slightly irregular, thick and hyperechoic, without evident loss of layering appreciated. The lumen of the small intestine is empty with no evidence of obstruction, foreign material or infiltrative disease.

The visible colon is normal in wall thickness (< 0.2 cm) and layering. Contents are consistent with normal formed feces and gas.

### ***Pancreas***

The pancreas is markedly enlarged in size with a moderately irregular contour. The pancreatic parenchyma is coarse, heterogenous and nodular with loss of normal curvilinear pattern noted. The pancreas is hypoechoic to the surrounding tissue.

### ***Free Abdomen***

There is no evidence of peritoneal effusion noted in these images. Lymph nodes are enlarged with swollen irregular capsular contour and loss of normal length to width ratio (rounded in shape). Nodes are hypoechoic with loss of normal parenchymal detail.

## **ULTRASONOGRAPHIC FINDINGS**

### **PRIMARY FINDINGS:**

Large, scalloped, irregular pancreatic mass, concerning for an aggressive infectious disease such as FIP given the concurrent hyperglobulinemia versus round cell neoplasia such as lymphoma surrounded by aggressive lymph nodes. The lymph nodes are most consistent with infiltrative round cell or metastatic neoplasia. A benign aggressive inflammatory response cannot be ruled out without tissue sampling +/- culture.

Scalloped spleen – can be associated with benign or malignant infiltrative disease. Common causes include a reactive spleen secondary to immune stimulus or early infiltrative round cell neoplasia such as lymphoma or mast cell tumor.

Diffusely thick muscularis relative to the small bowel mucosal layer. This finding can be seen with infiltrative inflammatory bowel disease as well as infiltrative neoplasia such as lymphoma.

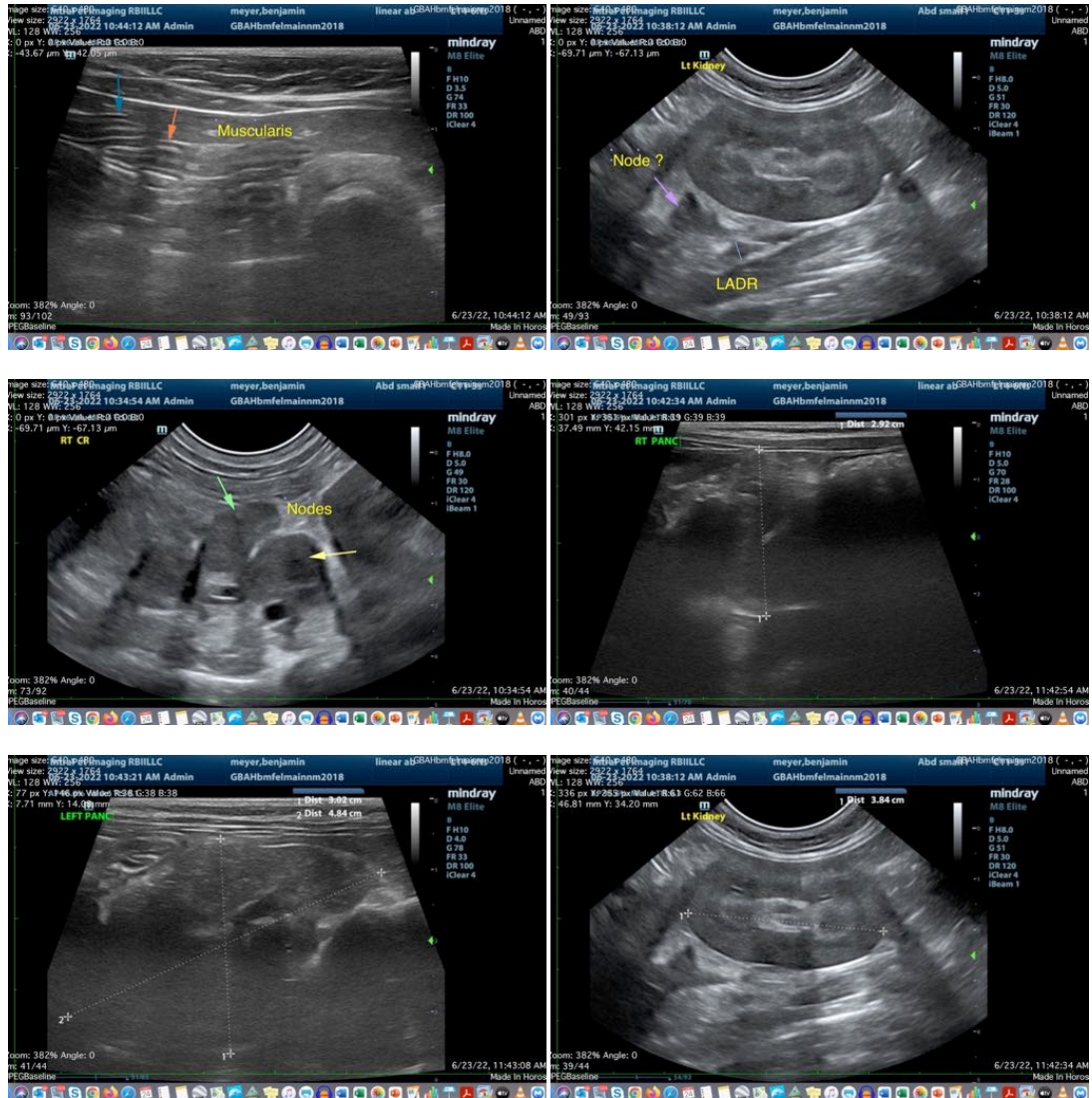
### **SECONDARY FINDINGS:**

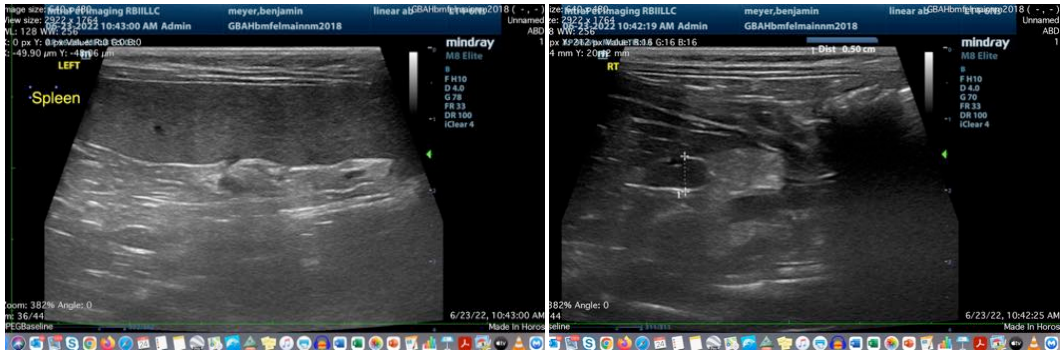
Urinary bladder debris.

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

1. Three view thoracic radiographs are recommended for further assessment of cardio-pulmonary status as well as to further evaluate for any evidence of metastatic disease, if not recently evaluated.
2. FNA of the pancreas and lymph nodes is recommended if the patient's coagulation status is appropriate.
3. If round cell neoplasia such as lymphoma is not diagnosed via cytology then further work-up of FIP should be considered.

4. Urinalysis and, if indicated based on urinalysis results, urine culture are recommended. If protein is present in an otherwise quiet sediment, protein quantification with a urine protein to creatinine ration is recommended.





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.

Beth Johnson, DVM DACVIM

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