

**DATE PRESENTING CLINICAL SIGNS**

8/21/23 History: Diabetic 1 week loss of appetite, 3 lb weight loss, some vomiting, lethargy, anorexia.

**PATIENT**

Little Davis

Current Medications: We started IV fluids today, Cerenia, Famotidine, Metronidazole All IV today.

Lab Results: Bilirubinemia and bilirubinuria, ALT, ALKP all elevated.

Radiographs: suggest a mass near the stomach. Liver is very suspicious as well.

Date of Previous IntraPet Ultrasound: No previous.

**SPECIES**

Feline

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Declined at this time.

Imaging Performed By: Stephanie Warga RDCS, RVT.

**BREED**

DSH

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

Neutered Male

**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.

**AGE**

7/2/11

Left kidney is normal in size (3.92 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.

**WEIGHT**

15 oz

Right kidney is normal in size (4.3 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.

**INTERPRETED BY**

Beth Johnson, DVM  
DACVIM

**Adrenal Glands**

Left adrenal gland is normal in size (0.47 cm at cranial pole), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

**HOSPITAL NAME**

Timonium AH

Right adrenal gland is normal in size (0.39 cm at cranial pole), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

**REFERRING VET**

Dr. Gernhart

**Spleen**

Spleen is subjectively normal in size with a normal smooth capsular contour. Parenchyma is appropriately finely textured and homogenous with normal echogenicity relative to surrounding tissue (hyperechoic to liver). No focal nodules or masses are observed. Splenic vasculature appears normal.

**INVOICE**

24022

**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. In the deep liver, a 1.4 cm x 2.8 cm cystic lesion/nodule is noted. Additionally, intrahepatic biliary mineral was noted.

Gallbladder is moderately distended with anechoic bile as well as suspended and gravity dependent echogenic debris. There is no evidence of effusion or inflammation. Shadowing mineral choleliths are also present. The wall is smooth without visible thickening. The cystic and common bile duct are dilated,

measuring 0.58 cm dilated to the level of a 3.0 cm x 4.0 cm heterogenous, partially cystic, primarily hyperechoic nodule/mass that appears biliary in origin and potentially involves the duodenal papilla.

### ***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 intestines are normal in wall thickness and layering. Small intestinal motility appears adequate (1-3 contractions per min). 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 and layering. Contents are consistent with normal formed feces and gas.

### ***Pancreas***

Pancreas is prominent (enlarged) in size, hypoechoic to surrounding tissue and has a mildly irregular undulating contour. Parenchyma is coarse with mixed echogenic remodeling noted. Pancreatic duct dilation is noted.

### ***Free Abdomen***

In the left cranial abdomen, there appears to be some tortuous blood flow of unknown origin and/or significance.

## **ULTRASONOGRAPHIC FINDINGS**

- The heterogenous cranial abdominal mass appears biliary in origin and appears to involve the duodenal papilla. Infiltrative neoplasia, such as carcinoma is a concern. Having said that, a benign inflammatory change and/or primary liver involvement, i.e., feline biliary cystadenoma, while considered less likely, can't be definitively ruled out.
- In the deep liver, there is a lesion more consistent with a feline biliary cystadenoma.
- Choleliths are noted within the gallbladder and throughout the intrahepatic biliary system. The dilated biliary system, however, appears to be caused by the mass vs obstructive mineral.
- Concurrent chronic smoldering pancreatitis is also suspected.
- Urinary bladder debris

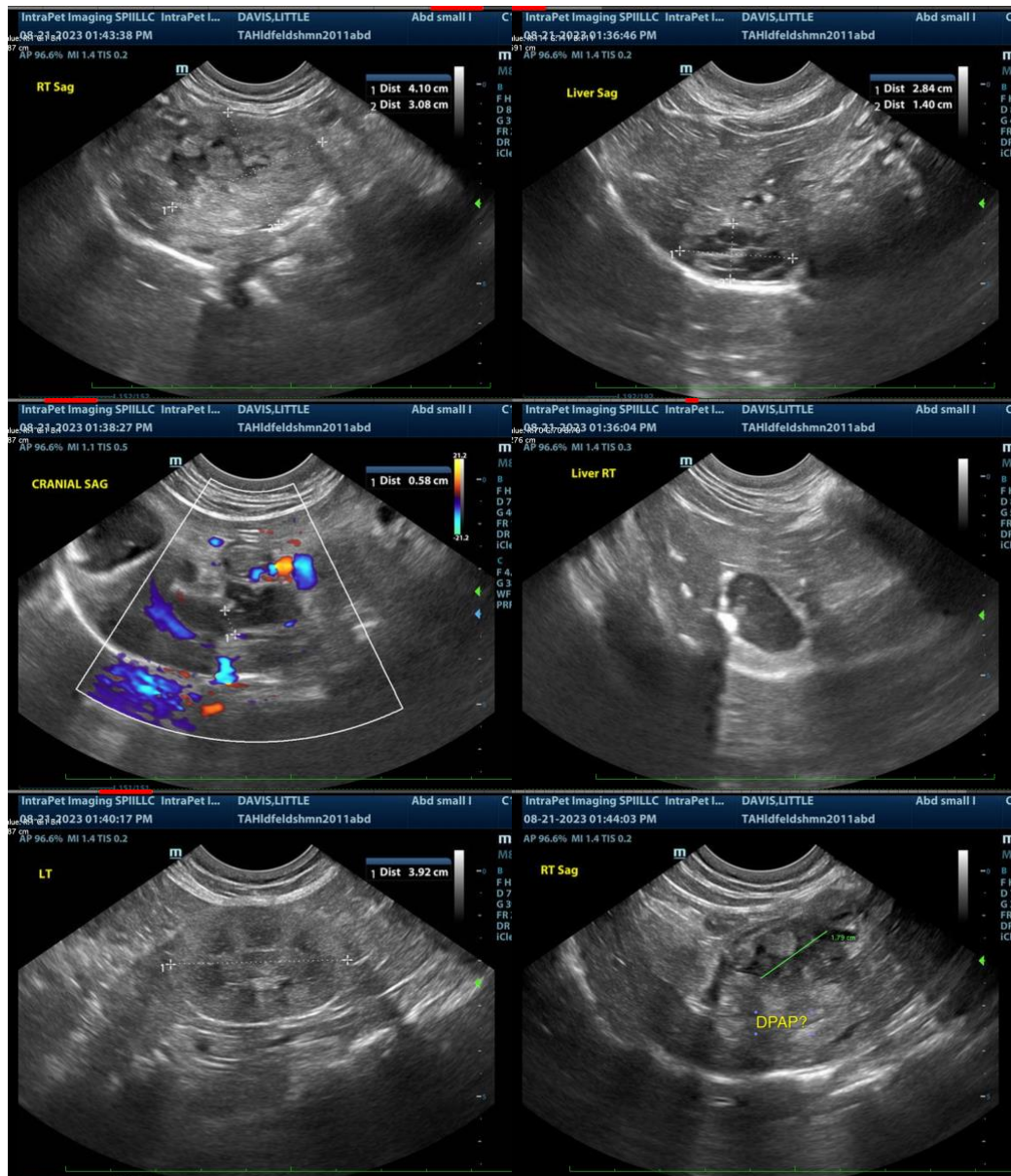
## **INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

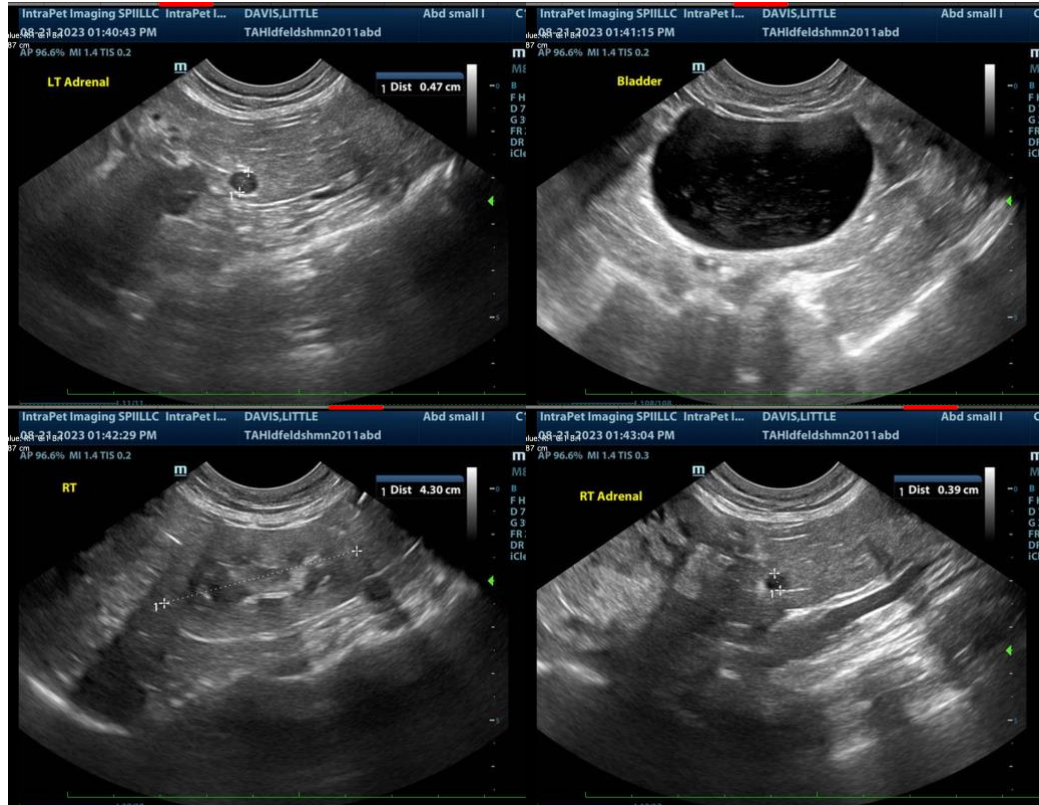
If not recently evaluated, three view thoracic radiographs are recommended for further assessment of cardio-pulmonary status as well as to further evaluate for any evidence of metastatic disease, if not recently evaluated.

A fine needle aspirate of the cranial abdominal/biliary mass could be considered if patients coagulation status is appropriate.

Alternatively, or potentially additionally, given the lack of ability to definitively identify the origin of the mass, as well as the concurrent presence of some atypical vascularity in the left cranial abdomen, advanced imaging in the form of an abdominal contrast CT scan could be considered.

Surgical resectability, while possible, is difficult to determine and is likely complicated if this mass involves the common bile duct and duodenal papilla. Therefore, if surgery is elected, a presurgical planning CT scan is recommended, as is consultation with a veterinary surgeon.





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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