

**DATE PRESENTING CLINICAL SIGNS**

2/23/23

Pet presented for swollen abdomen on 2/16/23. Abdominal effusion, trace pleural effusion. Carcinomatosis diagnosed via cytology.

Current Medications: None.

**PATIENT**

Boris Damron

Lab Results: 2/16/23 ALT 178, PSL 32, plt 708, eos 1014. 2/17/23 cytology: suspect carcinoma

Radiographs: abdominal effusion, trace pleural effusion

AFAST: could not identify primary mass

Date of Previous IntraPet Ultrasound: 11/8/21. See attached.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

Imaging Performed By: Stephanie Warga RDCS, RVT.

**SPECIES**

Feline

**BREED**

Domestic Shorthair

**SEX**

Neutered male

**AGE**

10/19/11

**WEIGHT**

12.8 lbs

**INTERPRETED BY**

Eric Lindquist, DMV  
DABVP, Cert. IVUSS

**HOSPITAL NAME**

Everhart VH

**REFERRING VET**

Dr. Notarangelo

**INVOICE**

42943

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**Urinary System**

The **bladder** presented concentric, irregular thickening with a large amount of debris. This may be involved in the neoplastic process. The urinary bladder and visible pelvic urethra were unremarkable for the level of repletion presented. The urine, however, did present some mildly echogenic debris consistent with mucous, exfoliated cells from renal or bladder origin, and/or blood clots as these echogenic changes can all present similarly. This is often related to urinary tract infection but may represent simple evidence of exfoliated debris or sterile inflammation. Cystocentesis, urinalysis, +/- culture would be recommended to rule out and define any UTI.

The **kidneys** revealed largely normal size and structure, corticomedullary definition and ratio (cortex 1/3 of medulla) were essentially maintained with some age-related loss of curvilinear patterns regarding the capsule and C/M junction. The cortices presented largely uniform texture with some increased echogenicity expected for his age patient. Medullary structure differed distinctly from that of the cortex. Mild to moderate mineralization was noted. The right kidney measured 4.97 cm. The left kidney revealed pyelectasia that measured 0.27 cm. The left kidney measured 4.44 cm.

**Adrenal Glands**

Both **adrenal glands** were visualized and recognized as having normal shape, size, position and echogenicity for this breed. The phrenic vasculature, glandular echogenicity and detail were unremarkable. Capsule, cortex, and medullary definition were normal for this age patient. The right adrenal gland measured 0.45 cm.

**Spleen**

The **spleen** was mildly enlarged with uniform, but subtly micronodular parenchyma, and undulating capsular contour. This is consistent with reactive spleen owing to immune stimulus or early infiltrative disease such as mast cell disease or lymphoma. 25-gauge FNA would be ideal if weight loss is an issue to differentiate early round cell neoplasia versus splenitis or reactive spleen all of which can present in this manner.

**Liver**

The **liver** revealed no evidence of passive congestion. Heterogenous parenchymal changes and an overt, hyperechoic nodule was noted and measured 0.9 cm. Other various, heterogenous parenchymal changes were noted in the liver. The common bile duct was dilated and tortuous, yet was followed to the duodenal papilla without entrance obstruction; however, the region of the right pancreatic limb was heterogenous and irregular. It appeared to be causing a post hepatic obstruction and tethering of the common bile duct. The gallbladder presented acceptably thin walls with primarily anechoic content.

### ***Gastrointestinal***

Examination of the **gastrointestinal tract** revealed a stomach and intestine free of stasis, of normal wall thickness, acceptable curvilinear mural detail, and peristaltic activity. Small and large intestine demonstrated normal luminal chyme and stool consistency respectively. No obstructive or overt infiltrative disease was noted. No associated abnormal lymphatic activity was noted.

### ***Pancreas***

The **pancreas** revealed a 3.0-4.0 cm coalescing omentum with nodular changes. A round, hypoechoic parenchyma is strongly suggestive for pancreatic mass or carcinoma. The small intestines and colon were unremarkable.

### ***Free Abdomen***

The abdomen presented a moderate amount of ascites. Echogenic debris was noted throughout the midabdomen.

### ***Heart***

Rapid view of the heart revealed no evidence of pathology with normal contractility and hypovolemic state owing to 3rd spacing fluid.

## **ULTRASONOGRAPHIC FINDINGS**

Concentric bladder wall thickening.

Heterogenous irregular pancreas with mass effect.

Age related renal changes.

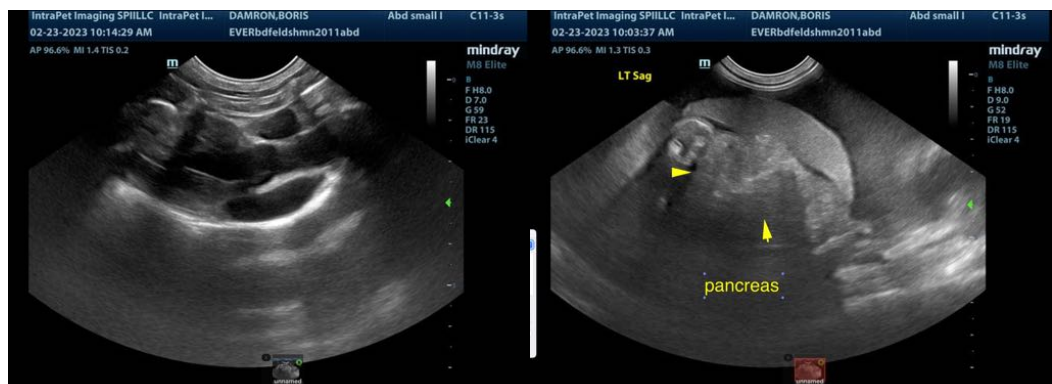
Free fluid, no evidence of passive congestion.

Nodular liver, suggestive for metastatic disease with some level of post hepatic obstruction.

Hypovolemic state of the heart.

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

Carcinomatosis type presentation is likely deriving from the pancreas and metastatic tot the liver with some level of post hepatic obstruction. Otherwise, geriatric abdomen. The prognosis is poor.





**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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