

**DATE PRESENTING CLINICAL SIGNS**

9/20/22

P presented 9/12/22 for anorexia, vomiting and diarrhea. Blood work at that time had NSF and p was treated with SQ fluids, Cerenia and prescribed Metronidazole and Proviab. 9/14/22 p still anorexic, no longer vomiting, but still having diarrhea (unable to give Metro due to p not eating). ACTH stim was done and was WNL. o declined rads at that time. Entyce was prescribed. 9/15/22 p returned for rads, IV fluids. NSF on rads, US was recommended. o declined at that time. 9/16/22 p returned for fluids. o declined transfer to ER, buprenorphine and Cerenia  
 9/19/22 o able to treat with Metro so diarrhea has resolved. p eating minimally. o not using Entyce due to possible reaction (drooling and lethargy). o consented to US.

**PATIENT**

Bear Abbate

**SPECIES**

Canine

**BREED**

Malamute

Date of Previous IntraPet Ultrasound: No previous.  
 Sedation: Not required to complete full diagnostic ultrasound.  
 Stat Report: Offered and declined by Dr.  
 Imaging Performed By: Stephanie Warga RDCS, RVT.

**SEX**

Male, neutered

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN****Urinary System**

The urinary bladder wall is normal in thickness and the mucosal surface is smooth. The bladder lumen is moderately distended with anechoic urine. No masses, inflammatory changes or calculi are observed. The region of the trigone and the visible portion of the proximal urethra are normal.

**AGE**

6/16/2016

The prostate is not definitively visualized due to its pelvic location.

**WEIGHT**

87.7 lbs.

The left kidney is normal size (8.00 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

**INTERPRETED BY**

Andrea Nicastro, DVM,  
 Diplomate ACVIM  
 (Small Animal Internal  
 Medicine)

The right kidney is normal size (8.14 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal loss of corticomedullary distinction. Mild pyelectasia is present (0.33 cm in the transverse plane). There is no evidence of nephroliths, infarcts or hydroureter. Renal vasculature is normal.

**HOSPITAL NAME**

Charm City VH

**Adrenal Glands**

The left adrenal gland is normal size (0.66 cm at cranial pole) (0.79 cm at caudal pole) (3.31 cm in length); normal shape; homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

**REFERRING VET**

Dr. Eavers

The right adrenal gland is normal size (0.59 cm at cranial pole) (0.68 cm at caudal pole) (3.11 cm in length); normal shape; homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

**INVOICE**

13994

**Spleen**

The spleen is normal in size (1.68 cm in width at the level of the hilus) with a normal capsular contour. There is appropriate echogenicity and echotexture. No focal lesions are observed. Splenic vasculature is normal.

**Liver**

The liver is subjectively normal in size with slightly irregular peripheral contours. The parenchyma is hypoechoic relative to the spleen and contains varying sized hypoechoic nodules throughout the organ. The largest lesion measures approximately 3 cm in diameter. Several of the nodules cause capsular expansion.

Vascular and biliary tracts are of normal volume with no evidence of congestion. The gall bladder lumen is moderately distended. The wall is slightly thickened (0.28 cm) and hypoechoic with a “double-walled” effect. A moderate amount of gravity-dependent echogenic debris is observed within the lumen. The cystic and common bile ducts are normal/not seen.

### ***Gastrointestinal***

The stomach and intestine are free of stasis and exhibit normal peristaltic activity. The gastric lumen is mildly distended with fluid and ingesta. The gastric wall and pylorus are normal in thickness with a normal layering pattern. The pyloric outflow tract is patent. The small intestinal lumen is not dilated. The small intestinal wall thickness is normal with a normal layering pattern and appropriate mural detail. Discreet masses are not identified. The colonic wall is normal. No obstructive disease is noted.

### ***Pancreas***

The region of the pancreas is isoechoic relative to surrounding omental fat. No obvious parenchymal abnormalities are observed. There is no evidence of regional inflammation or effusion.

### ***Free Abdomen***

The mesentery in the cranial abdomen is hyperechoic. Trace free fluid is observed.

### ***Lymph Nodes***

See *Other*.

### ***Other***

A 5.59 x 2.63 cm irregular, echogenic mass/lesion is observed in the right renal abdomen. The lesion is slightly heterogeneous in appearance.

The caudal vena cava and its distal branches appear to contain ill-defined clots.

## **ULTRASONOGRAPHIC FINDINGS**

### **Primary Findings:**

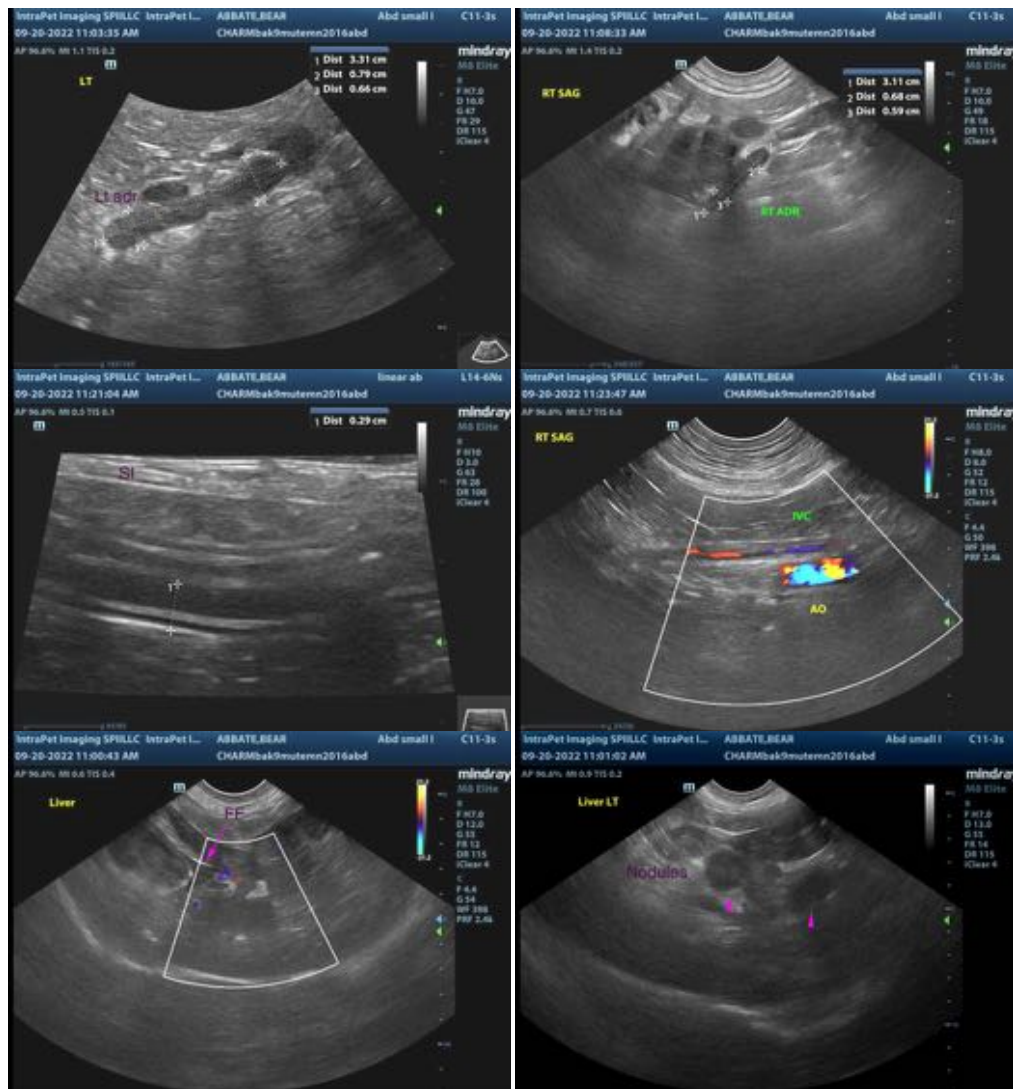
- The hepatic nodules are concerning for infiltrative neoplasia (i.e., round cell tumor). However, multifocal inflammatory disease/abscessation cannot be completely excluded.
- Cranial peritonitis is present, likely secondary to hepatic pathology.
- The gallbladder wall changes could be consistent with cholecystitis, low oncotic pressure, increased hydrostatic pressure (i.e., due to congestive heart failure), anaphylaxis, autoimmune disease, other.
- The mass/lesion in the right cranial abdomen could be consistent with an enlarged lymph node, a lesion within the mesentery, right adrenal mass, blood clot, other.

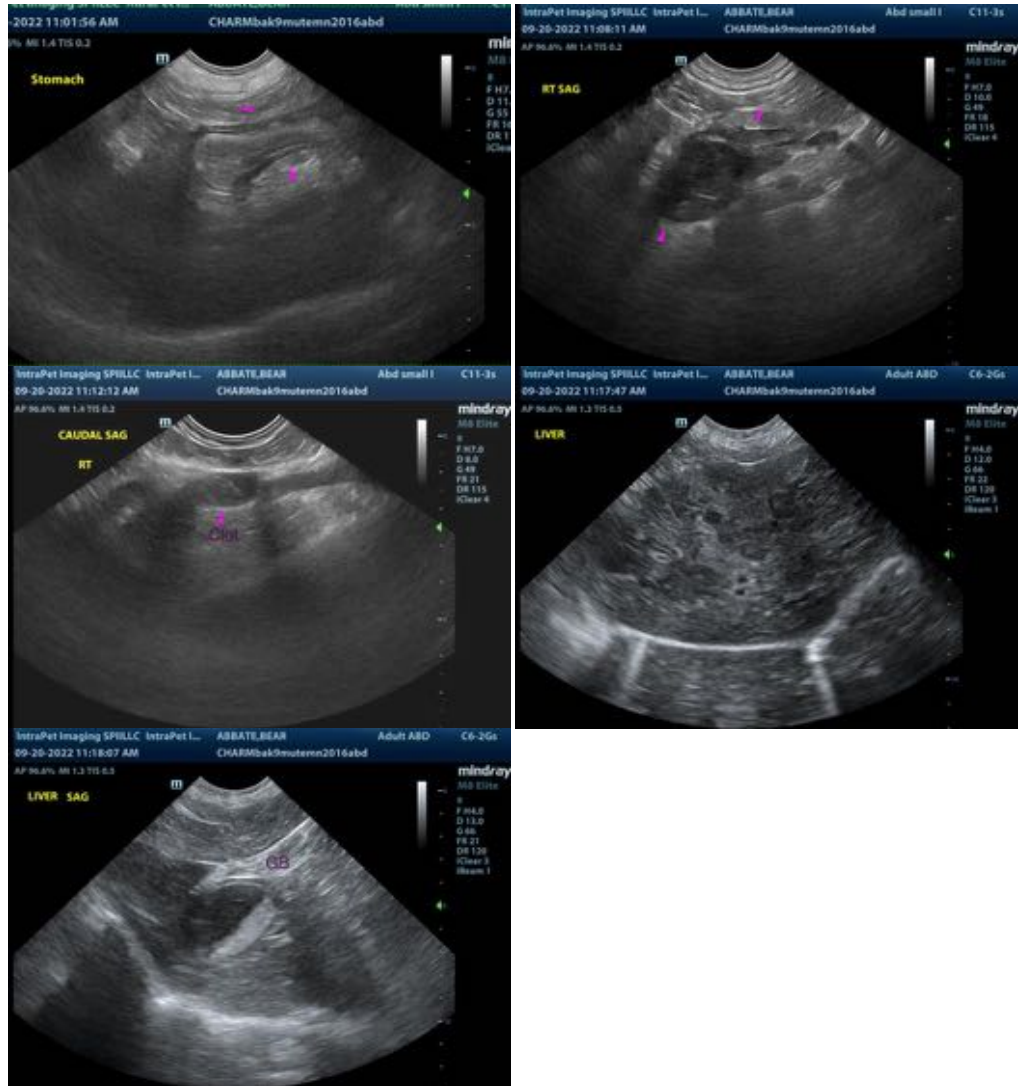
### **Secondary Findings:**

- The mild right pyelectasia may be secondary to IV fluid therapy, age-related remodeling, pyelonephritis or some combination thereof.

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

- Baseline lab work, including a CBC, chemistry panel, urinalysis, and T4 is recommended, if not already performed.
- Three-view thoracic radiographs are recommended to assess for pulmonary metastases.
- A fine needle aspirate of the liver is recommended, if clotting status is appropriate. A 25-gauge needle should be used. If cytology results are inconclusive, surgical biopsies may be necessary to get a definitive diagnosis.
- An abdominal CT scan can be considered to further evaluate for thrombosis, particularly with regard to the caudal vena cava. In the interim, consider initiation of an antithrombotic agent (i.e., Clopidogrel).





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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