

**DATE PRESENTING CLINICAL SIGNS**

5/9/23 Chronic urinary tract infections since March.

**PATIENT**

Bailey Houser

Current Medications: Proin 25mg ½ BID.  
 Date of Previous IntraPet Ultrasound: No previous.  
 Sedation: Not required to complete full diagnostic ultrasound.  
 Stat Report: Not requested.

**SPECIES**

Canine

Imaging Performed By: Rachel Brillhart, RDMS.

**BREED**

Terrier

**SEX**

Neutered Male

**AGE**

6/14/10

**WEIGHT**

34 Pounds

**INTERPRETED BY**Eric Lindquist, DMV  
DABVP, Cert. IVUSS**HOSPITAL NAME**

Madonna VC

**REFERRING VET**

Dr. Brockett

**INVOICE**

22434

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

The **urinary bladder** presented concentric wall thickening with polypoid changes and sand accumulation. The bladder mass/concentric thickening extended approximately 4.1 cm. Wall thickness measured up to 1.16 cm. The mineralization embedded within the pelvic urethra. The mineralization within the urethra appeared to be luminal, however, regional inflammation was present. The residual prostate was uniform, measuring 1.3 cm.

The **kidneys** revealed largely normal size and structure, corticomedullary definition and ratio (cortex 1/3 of medulla) were essentially maintained with some mild 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 and no evidence of pelvic dilation was present. Mineralization was present in the kidneys. The left kidney measured 5.1 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. A nodule (1.05 cm x 0.93 cm) was noted in the caudal pole of the left adrenal gland. The left adrenal gland measured 1.05 cm at the caudal pole and 0.69 cm at the cranial pole x 2.22 cm in length. The right adrenal gland measured 2.14 cm x 0.73 cm at the cranial pole and 0.74 cm at the caudal pole.

**Spleen**

The **spleen** revealed a hypoechoic expansive mass, measuring 2.78 cm x 2.62 cm.

**Liver**

The **liver** images from right and left intercostal as well as subcostal views revealed subjectively normal liver size, contour, and structure. Some mild age-related parenchymal remodeling was noted but likely not clinically significant at this time. Vascular and biliary tracts were of normal volume and no evidence of congestion was noted. The gallbladder presented some dependent debris with essentially normal contour. The cystic and common bile ducts were normal. Hyperechoic lipogranulomatous changes noted.

**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 base and limbs of the **pancreas** were observed to be largely isoechoic to surrounding omental fat. Pancreatic duct and capsular contour were acceptably normal and parenchyma respected normal curvilinear patterns. No overt evidence of active inflammatory or neoplastic disease was noted.

### **Other**

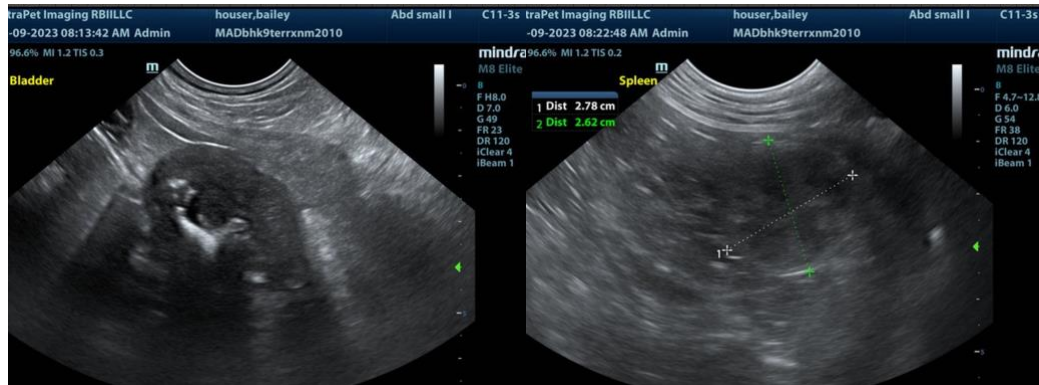
A rapid view of the **heart** revealed no evident pathology in the right auricle or pericardium. Contractility appeared adequate.

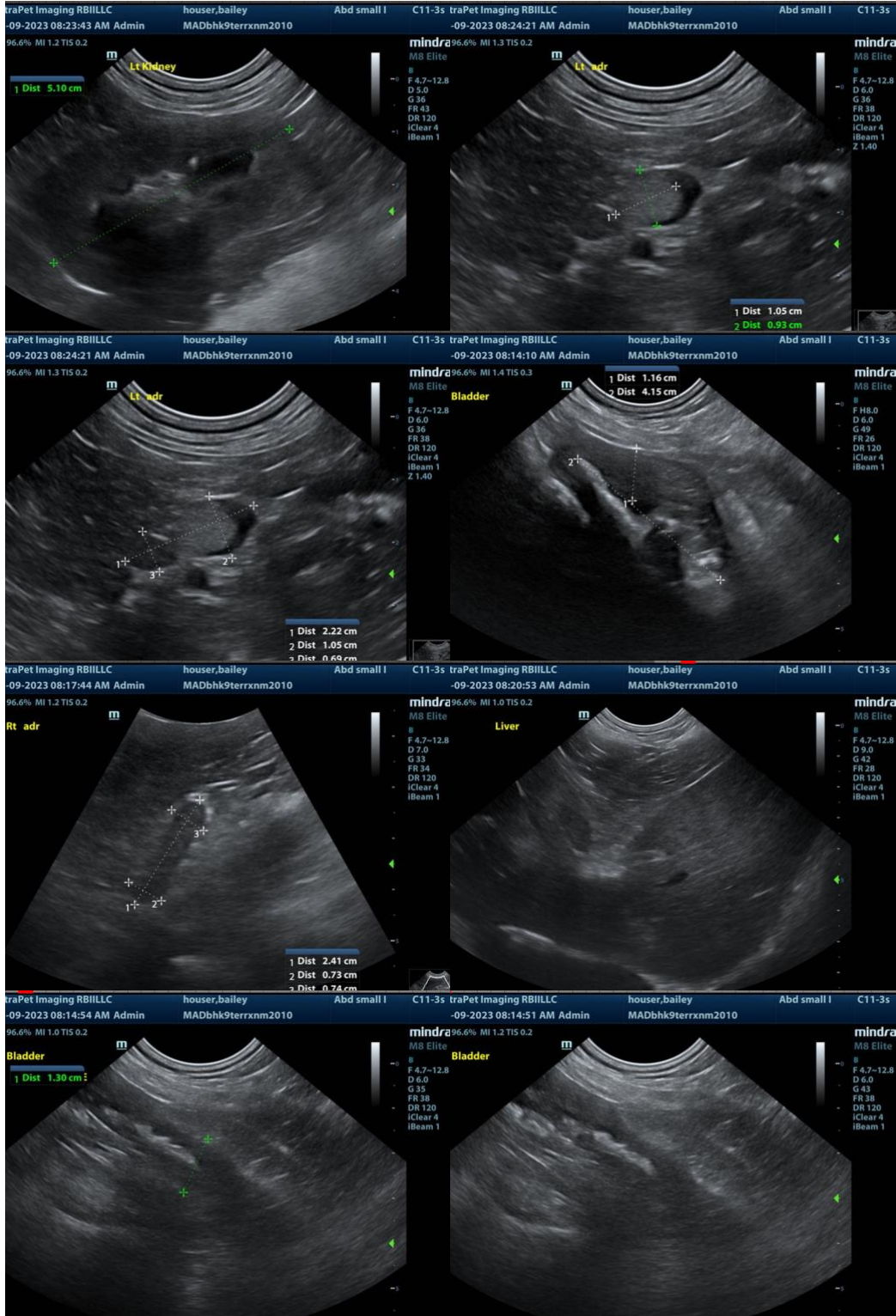
### **ULTRASONOGRAPHIC FINDINGS**

- Concentric bladder wall thickening with sand and calculi. Mild urethral thickening as well.
- Splenic mass- round cell neoplasia, hemangiosarcoma, hyperplasia are all possible.
- Age-related hepatic changes with hyperechoic lipogranulomatous changes
- Left adrenal nodule- likely adenoma. Adenocarcinoma and pheochromocytoma are less likely.
- Age-related renal changes with mineralization

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

I recommend ultrasound guided traumatic catheterization in this patient, as well as BRAF testing to assess for carcinoma, along with bladder sand and mineralization vs chronic cystitis. Blood pressure measurements are indicated. Prognosis is guarded, depending upon the bladder presentation, if carcinoma is present. If carcinoma is not present, then splenectomy is indicated. Liver inspection and biopsy are indicated +/- cystotomy, sand analysis and culture, as well as bladder wall biopsy and culture, but I would start with traumatic catheterization in this patient with ultrasound guidance.







**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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