

**DATE PRESENTING CLINICAL SIGNS**

7/17/23

**PATIENT**

Buddy Parks

History: 6/26/23 Buddy presented for a hardened growth on the back that had irregular edges and was ~5cm on the right dorsal hip. Concerns for sarcoma/neoplasia. Bloodwork came back with hypoalbuminemia. On 7/10/23, patient returned with pale gums and yellow whites of eyes. Icterus. Repeat bloodwork showed markedly elevated liver values

**SPECIES**

Canine

**BREED**

Chihuahua

Current Medications: Enalapril 5mg 1/2 PO SID, Clavamox 62.5mg 1 tablet PO BID, and started 7/10 metronidazole 0.7ml PO BID

Lab Results: ALT 1819, ALP 2020, Ca 7.9

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.

**SEX**

Neutered Male

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN****AGE**

11/23/16

**Urinary System**

The **urinary bladder**, trigone, and pelvic urethra presented normal thicknesses and normal tone. The ureters were not visible which is normal. No uroliths or sediment were visualized and anechoic urine was present. No evidence of inflammatory or neoplastic changes were noted. Ureteral papillae were normal. The prostate was uniform, measuring 0.84 cm.

**WEIGHT**

9.7 Pounds

The **kidneys** revealed normal size and structure, corticomedullary definition and ratio for this age. The cortices presented largely uniform texture with normal echogenic relationship to liver and spleen. Medullary structure differed distinctly from the cortex. The capsules were acceptably uniform without significant irregularities. Slight pyelectasia was noted in the left kidney, measuring 0.25 cm. The left kidney measured 4.93 cm. The right kidney measured 4.26 cm. Slight pinpoint mineralizations were noted.

**INTERPRETED BY**Eric Lindquist, DMV  
DABVP, Cert. IVUSS**Adrenal Glands**

The **adrenal glands** appeared slightly enlarged and swollen. No evidence of focal capsular expansion or invasion into the phrenic veins were noted. No overt suspicion of neoplasia was noted. This is considered likely a hyperplastic change associated with stress or adrenal endocrinopathy (PDH). If isosthenuria is persistently present and the patient morphologically suggests Cushing's disease then ACTH testing would be indicated. The left adrenal gland measured 2.05 cm x 0.67 cm at the caudal pole and 0.59 cm at the cranial pole. The right adrenal gland measured 1.92 cm x 0.74 cm at the cranial pole and 0.6 cm at the caudal pole.

**HOSPITAL NAME**

Abbey AH

**REFERRING VET**

Dr. Kluttz

**Spleen**

The **spleen** revealed an expansive mixed echogenic 2.4 cm mass in the mid body. Other heterogenous changes were noted in the spleen.

**INVOICE**

23428

**Liver**

The **liver** revealed increased portal markings. The gallbladder was unremarkable other than mild overdistention. The common bile duct measured the upper limits of normal at 0.43 cm.

**Gastrointestinal**

The **stomach** was overdistended with fluid. Dilated gastric fundus was noted. The small intestine and colon were unremarkable.

### **Pancreas**

The **pancreas** revealed significant heterogenous mixed echogenic changes throughout the left and right limbs. Generalized enlargement was present.

### **Other**

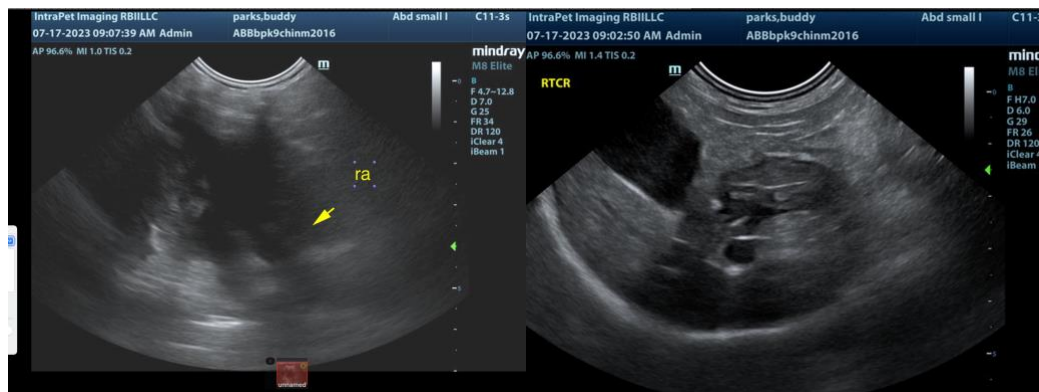
A rapid view of the **heart** revealed no evident pathology in the right auricle.

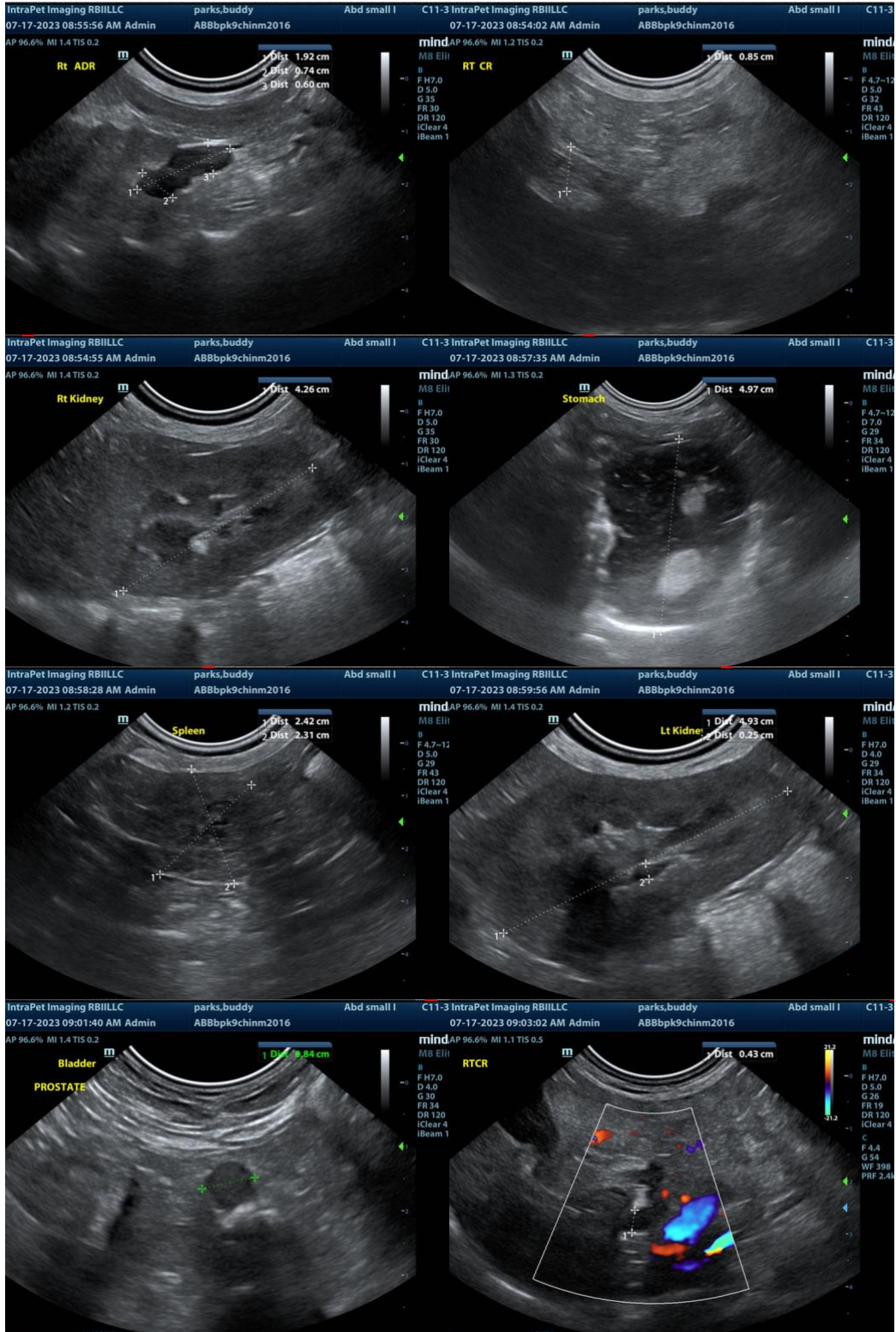
### **ULTRASONOGRAPHIC FINDINGS**

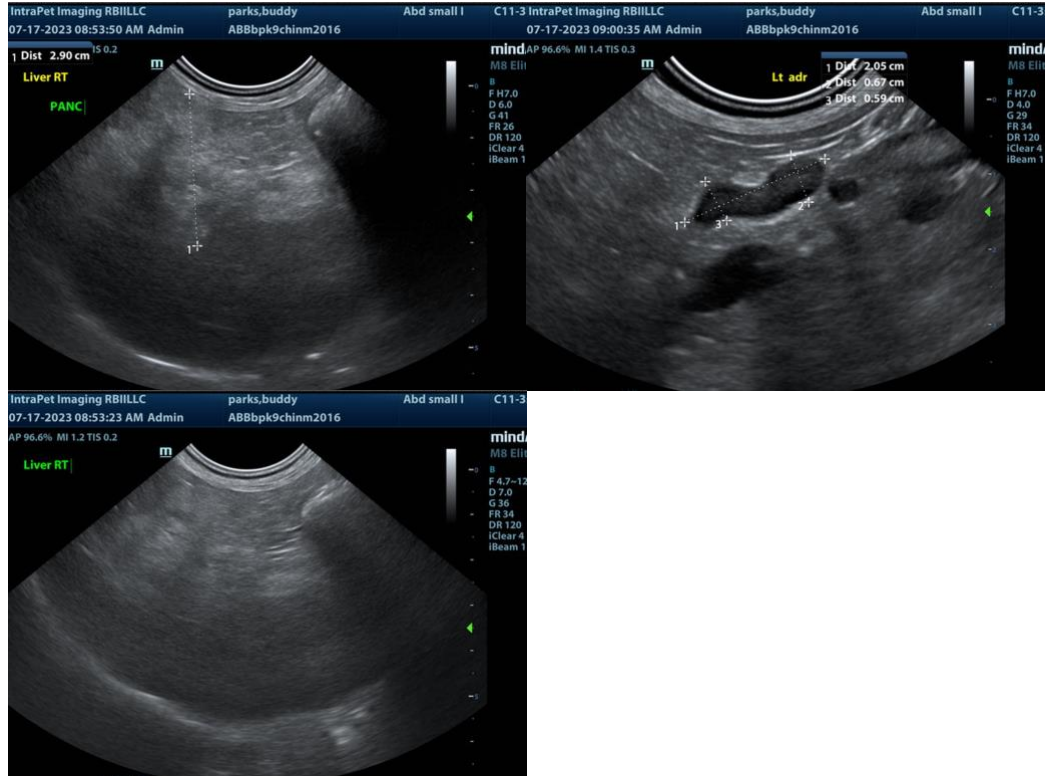
- Chronic active pancreatitis
- Early posthepatic obstruction
- Gastric stasis
- Splenic mass
- Minor bilateral adrenal hypertrophy
- Left kidney pyelectasia and mineralization in both kidneys

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

IV fluid support, leptospirosis titers and GI protectants are all indicated. Stabilization of the patient followed by splenectomy, pancreatic inspection and liver biopsy are indicated. Some debridement of the pancreas may be necessary in this patient. Splenic mass differentials include hemangiosarcoma, hyperplasia and cholangiohepatitis. Chronic active pancreatitis is likely the cause of the hepatic/pancreatic presentation. Inspection of the common bile duct +/- lavage may be necessary depending upon the progression/regression in the following days. Eventual common bile duct redirection might be necessary yet not overtly needed at this time; however, the splenic mass is precarious. Chest radiographs are warranted to assess for metastatic disease. No evidence of hemorrhage noted. Underlying Cushings/PDH may be an issue. If the patient appears cushingoid, and USG is  $<1.020$ , once clinically stable, then eventual work up for PDH is indicated.







**The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. 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.

**Eric Lindquist**, DMV, DABVP, Cert. IVUSS, CEO of SonoPath.com  
[info@SonoPath.com](mailto:info@SonoPath.com)