

**DATE PRESENTING CLINICAL SIGNS**

12/21/21

History: Presenting Complaint: Vomiting; Not Eating. Date: 12-19-2021. Notes: Coco- 6 yr female intact shih tzu mix - not eating, not drinking 3 days - weakness - vomiting - Diarrhea - Intact female. ATO- not eating and diarrhea 2 days but was still drinking today; vomiting water and vomited more times throughout the day. PU/PD last few days. No weight loss or gain. Shivering when breathing. Diarrhea- yellow color. Every now and then coughing like choking- rare. Unsure if dietary indiscretion. O wife died few days ago, was hoarder situation, house is under distress. Unsure if P got into anything. Rats have recently gotten in house and were drinking the water from the dish, O killed most of the rats. Intact female, no hx of puppies, > 1 year since last period. Eyes appeared cloudy; hx of trouble with ears. Obtained ~4 years ago from mis-treated home, matted and skinny when obtained. O thinks that she is 6-8 years of age but is unsure. Hx of being sensitive around the ribs- may have issue with harness/ growling. Hx of fleas- allergic to flea meds- receives baths with dawn dish soap and kills the fleas with chapstick. No hx of specific disease, Skin was never worked up. Assessment: not eating, not drinking 3 days weakness; Vomiting; Diarrhea; Intact female; Alopecia, mal odor to skin; Fever. No obvious mammary masses DDX: kidney disease/ pyelonephritis/ UTI vs gastroenteritis vs pancreatitis vs diabetes vs neoplasia vs leptospirosis vs leptospirosis vs other Risk for pyometra, mammary cancer. Plan: Hospitalization, IV catheter, fluid therapy, and further treatment as needed CBC/CHEM/ Lytes,UA, BP, +- 4dx. +- US, x rays. leptospirosis snap.

**PATIENT**

Coco Lannon

**SPECIES**

Canine

**BREED**

Shih Tzu X

**SEX**

Intact Female

**AGE**

12/19/15

**WEIGHT**

15.8 Pounds

**INTERPRETED BY**Eric Lindquist, DMV  
DABVP, Cert. IVUSS**IMAGING PERFORMED BY**

Rachel Brilhart RDMS

**HOSPITAL NAME**Animal Emergency  
Hospital**REFERRING VET**

Dr. Kalwa

**INVOICE**

33632

Current Medications: Unasyn, Pantoprazole, Buprenex, Cerenia, Potassium Chloride, Capstar (12/19).

Lab Results: USG 1.018, bloodwork unremarkable.

Radiographs: AFAST: No Obvious uterine loops; enlarged right kidney with blunted renal pelvis - pyelectasia

TFAST: No FF. Xray Abdomen 2 View- no obvious mass or obstructive changes.

Date of Previous IntraPet Ultrasound: No previous IntraPet scans.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

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

The **urinary bladder**, trigone, and pelvic urethra presented normal thicknesses and normal tone. The ureters were not visible which is normal. A bladder calculus was noted measuring 0.53 cm with suspended debris. No evidence of inflammatory or neoplastic changes were noted. Ureteral papillae were normal.

The **left kidney** presented mild thickened cortices and slight irregular contour with minor hyperechoic medullary rim sign. Pyelectasia noted in the left kidney at 0.68 cm. The left kidney measured 4.5 cm. A pelvic calculus was noted in the left kidney.

The **right kidney** was swollen. Mild pericapsular inflammation noted. Slight mineralization noted, non-obstructive. Pyelectasia noted with echogenic debris, likely purulent. The right kidney measured 5.19 cm. The right ureter was mildly dilated at 0.35 cm. Mild inflammatory pattern noted around the right proximal ureter.

**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 left adrenal gland measured 2.01 cm x 0.61 cm at the caudal pole and 0.55 cm at the cranial pole. The right adrenal gland measured 1.96 cm x 0.55 cm at the caudal pole and 0.55 cm at the cranial pole.

### ***Spleen***

The **spleen** presented a smooth homogeneous parenchyma hyperechoic to liver and renal cortical parenchyma. The capsule was smooth without noticeable expansion or deviation from within the spleen or adjacent pathology. The splenic vasculature demonstrated normal volume without signs of congestion or thrombosis. No sonographic evidence of acute or chronic inflammatory, neoplastic, or infarctual changes were noted.

### ***Liver***

The **liver** images submitted revealed subjectively normal liver size, contour, and structure. Parenchymal echogenicity was naturally coarse and hypoechoic to the spleen. Vascular and biliary tracts were of normal volume with no evidence of congestion. The gallbladder presented acceptably thin walls with primarily anechoic content. The cystic and common bile ducts were normal. No pathological hepatic lymphadenopathy was evident. No overt structural evidence of inflammatory, infiltrative or regenerative pathology was evident.

### ***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. The right limb measured 1.1 cm.

### ***Other***

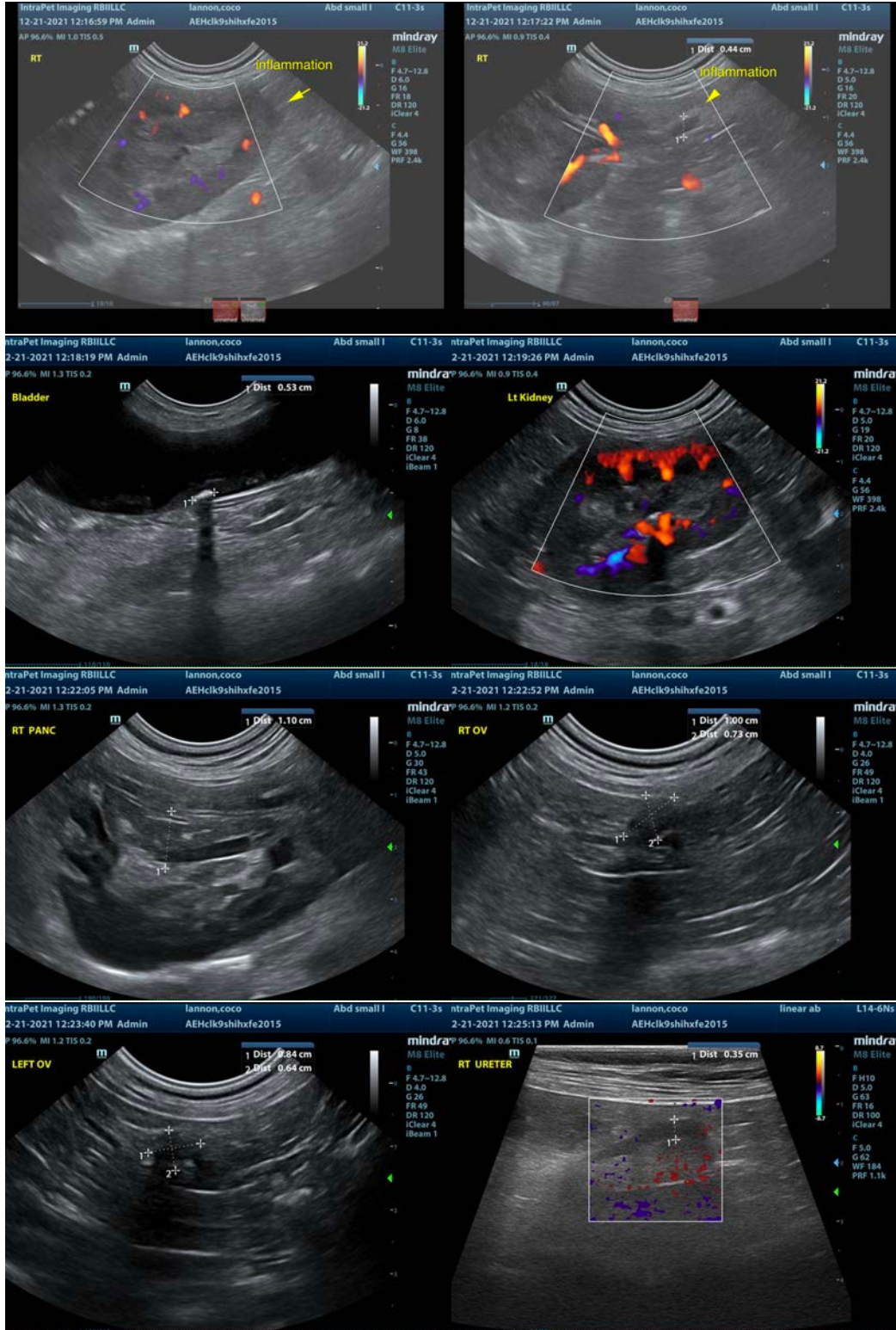
The left ovary was uniform, measuring 0.84 cm x 0.64 cm.

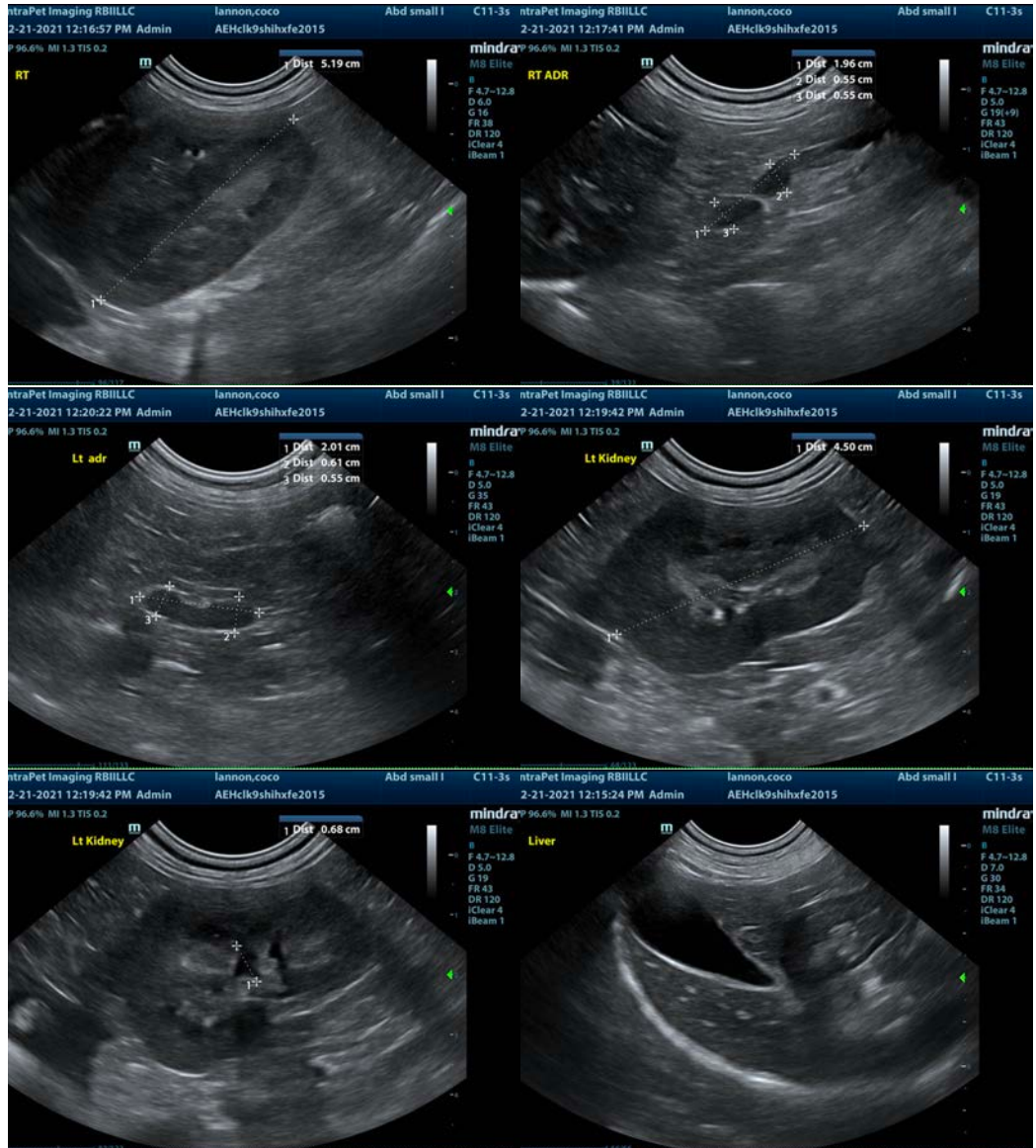
### **ULTRASONOGRAPHIC FINDINGS**

- Bladder calculus
- Pyelonephritis pattern right kidney – likely owing to recent passage of calculus with secondary minor hydroureter with ureteritis pattern.

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

Recommend 72 hour IV fluid protocol, urine culture and sensitivity, broad-spectrum antibiotics, pain management, and recheck sonogram.





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.

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