



PATIENT PRESENTING CLINICAL SIGNS

Tiffany Bower

History: Pt has had fairly stable kidney disease for the last year or so. Pt most recently had a kidney panel run on 11/7. Values are below. O noted that pt had been having a decreased appetite. Pt takes aluminum hydroxide and O reports that the pet spits it up regularly. On 11/19 pt presented for 24 hour history of trouble breathing and coughing. Pt had been at the groomer the day before. The only other place the pet had been was here the week before for an in and out visit for bloodwork. On PE the pt has very loud crackles/wheezing bilaterally. No dyspnea unless on her back, but tachypnea. No murmur ausculted, though difficult to hear heart well. Though no murmur noted previously either. Top ddx prior to rads were aspiration pneumonia or kennel cough/flu. After rads, primary concern is for neoplasia (small nodule in the right caudal lung lobe) and/or hemorrhage or PTE and less likely pneumonia (interstitial pattern in caudal left lung). Ultrasound to see if primary neoplasia in abdomen causing mets in chest.

SPECIES

Canine

BREED

Sheltie

SEX

Spayed female

Abnormal PE/Chem/CBC/UA Results: BUN 64 - 62 to 86 to 64 Cr_t 1.2 - 1.2 to 1.6 to 1.1 Phos 8.2 - 5.3 to 7.1

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

AGE

13 years

Urinary System

The **urinary bladder** wall revealed slight, micropolypoid changes. The ureters were not visible which is normal. The bladder revealed small calculi. Small calculus measured up to 0.4 cm. No evidence of inflammatory or neoplastic changes was noted. Ureteral papillae were normal.

WEIGHT

22.8 lbs

The **kidneys** presented a relatively uniform cortical hyperechogenicity when compared to the renal medulla, spleen and liver. No overt masses were noted. Corticomedullary definition was nebulous and the ratio favored the cortex slightly. The ureters were not visible and assumed to be normal. These changes are most consistent with chronic interstitial nephritis yet infiltrative disease could not be entirely ruled out without biopsy though neoplasia is not suspected. The right kidney revealed a cortical cyst that measured 1.2 cm. The right kidney measured 4.31 cm. The left kidney revealed a cortical infarct. The left kidney measured 4.6 cm with slight mineralization noted in the renal pelvis.

INTERPRETED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

IMAGING PERFORMED BY

Dr. Plourde

Adrenal Glands

The left **adrenal gland** was 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 0.4cm. The right adrenal gland was not visualized.

HOSPITAL NAME

TotalBond VH

REFERRING VET

Dr. Plourde

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 was noted.

INVOICE

42630

DATE

11/21/22



PATIENT

Liver

Tiffany Bower

The **liver** images from right and left intercostal as well as subcostal views revealed subjectively normal liver size, contour, and structure. Some 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 revealed minor polyps that are non-pathological. Comet tail lung pattern was noted through the diaphragm.

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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.

SEX

Spayed female

AGE

13 years

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.

WEIGHT

22.8 lbs

ULTRASONOGRAPHIC FINDINGS

Moderate degenerative renal changes with cortical cyst on the right and infarct on the left with minor pelvic mineralization of the left kidney.

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Eric Lindquist, DMV
DABVP, Cert. IVUSS

Small bladder calculi.

Comet tail lung pattern was noted.

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INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

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Chest radiographs are warranted to assess for alveolar disease due to the comet tail lung pattern. The patient may be passing calculi periodically complicating the renal presentation. Supportive care for chronic renal disease and assessment for any evidence of UTI is indicated. Eventual cystotomy can be considered if the patient is stable enough for surgery. However, medical dissolution may be an option. The echotexture and appearance of the calculus would suggest oxalate calculus if that fits the urinalysis parameters.

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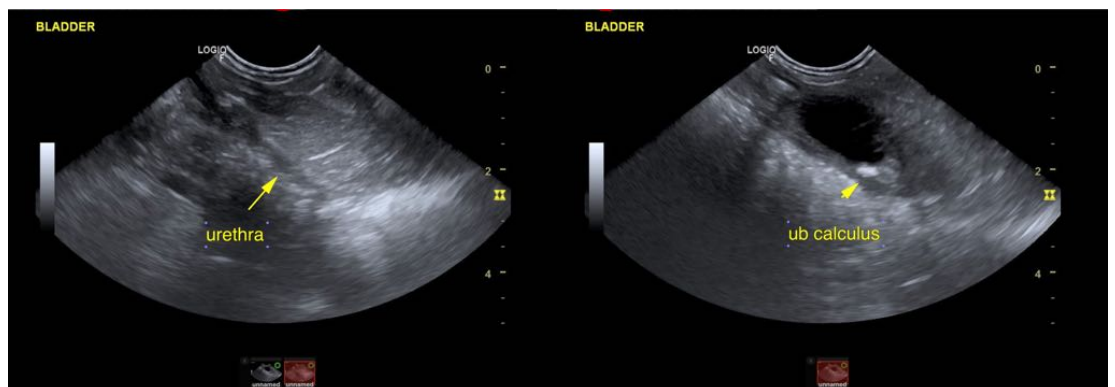
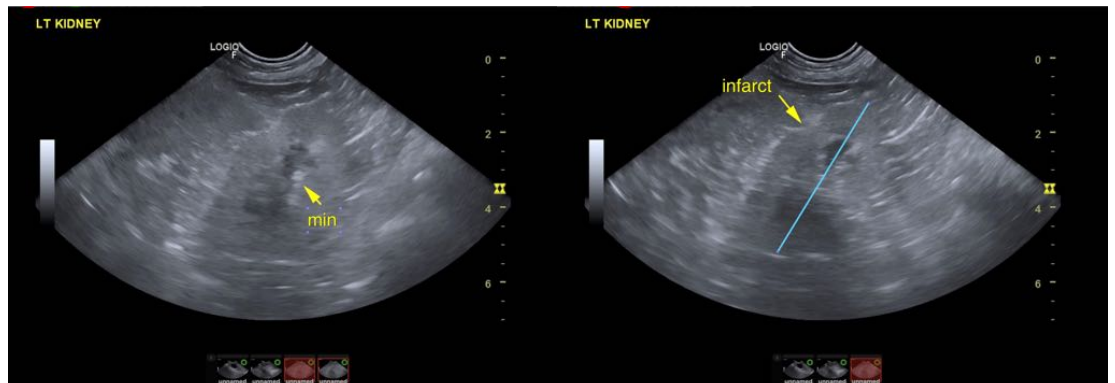
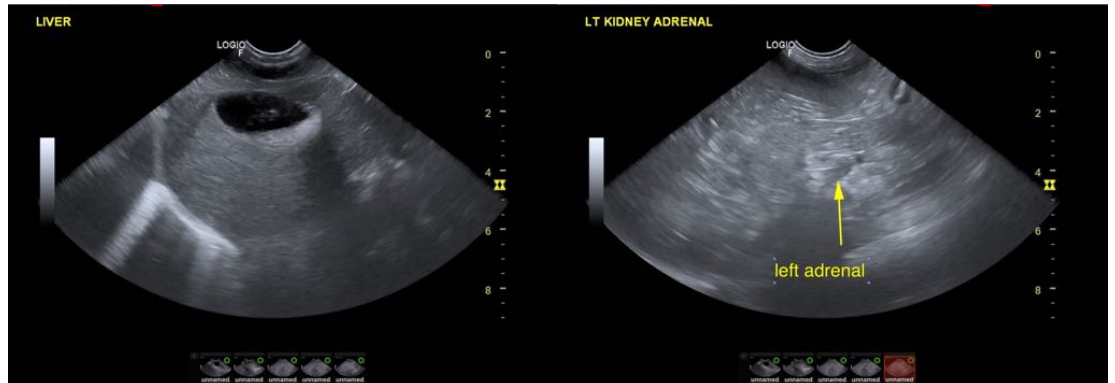
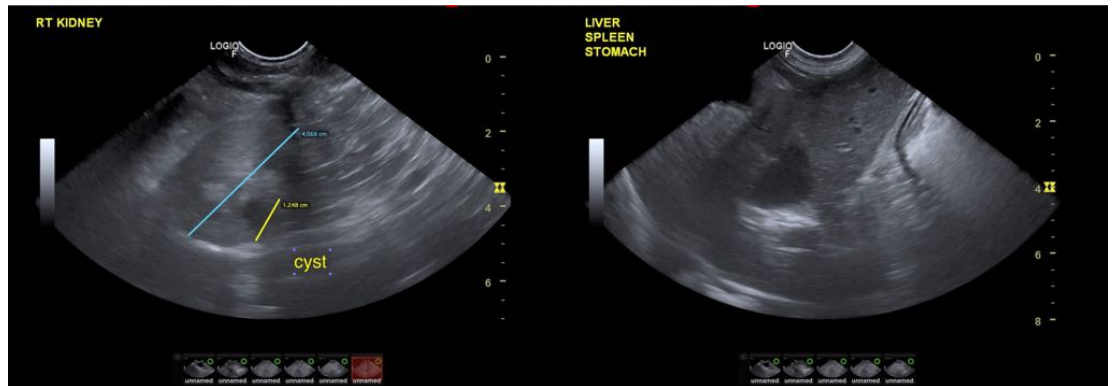
Dr. Plourde

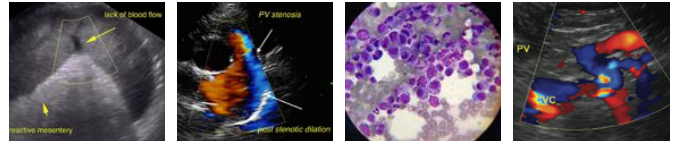
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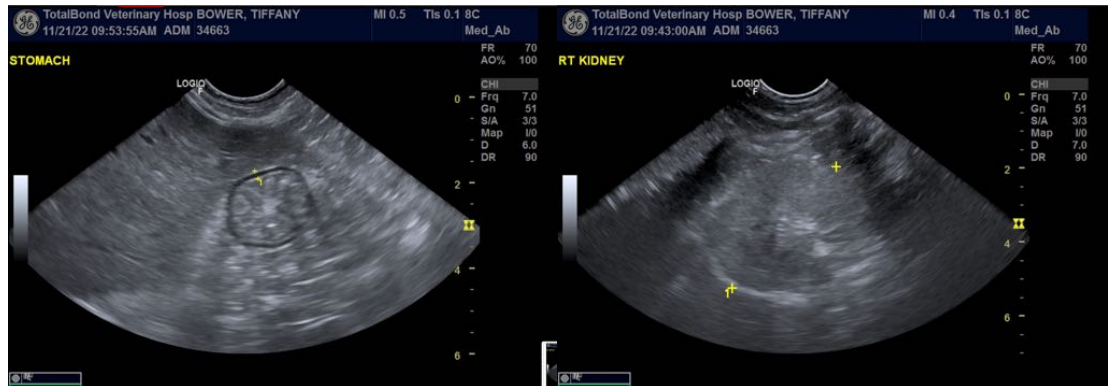
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

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