



PATIENT PRESENTING CLINICAL SIGNS

Max Chapman

History: V/D x 2 mos on and off, decreased appetite. Current meds: Soloxine .4mg bid, Carprofen bid, Pepcid, Enalapril 10mg bid.
Abnormal PE/Chem/CBC/UA Results: ALKP 761, BUN 62, Creat 2.5, Ca⁺ 12.2, ionized Ca + wnl 1.29, Amyl 1153, USG 1.025, 3+protein, UPC 2.7.

SPECIES

Canine

BREED

Terrier Mix

SEX

Neutered male

AGE

16.5 years

WEIGHT

40 lbs

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The **urinary bladder** presented a relatively uniform thickening of the cranioventral and craniodorsal mucosae with micropolypoid mucosal changes without involvement of the submucosae. The bladder wall thickness measured 0.53 cm. The urine presented some echogenicity consistent with suspended debris. No evidence of urethral pathology was present. This presentation is most consistent with chronic cystitis. Technically transitional cell carcinoma cannot be ruled out without histopathological review but is not overtly suspected based on this pattern. Cystocentesis and urine culture +/- pathological review of urine cytology would be warranted. No overt calculi were present at this time.

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. Polycystic renal changes were noted. The largest cyst measured 2.15 cm in the left kidney. Microcystic changes were noted elsewhere. The left kidney measured 6.16 cm. The right kidney measured 5.81 cm.

INTERPRETED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

IMAGING PERFORMED BY

Shari Reffi, CVT

HOSPITAL NAME

Animal Care Center of
Flanders

REFERRING VET

Dr. Hallihan

INVOICE

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Adrenal Glands

Both **adrenal glands** were visualized and recognized as having largely normal shape, size, position and acceptable echogenicity for this age group and breed. Some heterogeneity was noted within the adrenal parenchyma without concerning capsular distortion. These changes are likely age related but should be monitored by sonogram should the patient be suspected of having adrenal disease. The right adrenal gland measured 3.53 x 1.42 cm at the cranial pole and 0.58 cm at the caudal pole. The left adrenal gland measured 2.24 x 0.83 cm at the caudal pole and 0.65 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 was noted.

Liver

The **liver** was riddled with multiple, expansive, undifferentiated masses. The largest mass occupied the caudate process and measured approximately 8.0 cm. Both the left and right liver presented undifferentiated nodular changes. The gallbladder presented acceptably thin walls with primarily



PATIENT

anechoic content. The cystic and common bile ducts were normal. No pathological hepatic lymphadenopathy was evident.

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Gastrointestinal

Canine

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.

BREED

Terrier Mix

SEX

Pancreas

Neutered male

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.

AGE

16.5 years

ULTRASONOGRAPHIC FINDINGS

Chronic degenerative renal disease with polycystic changes. Interstitial nephrosis pattern.

WEIGHT

Chronic cystitis bladder pattern.

40 lbs

Multi-focal hepatic neoplasia.

INTERPRETED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Ultrasound-guided FNA of the liver masses could be considered for further definition. However, the masses are not resectable.

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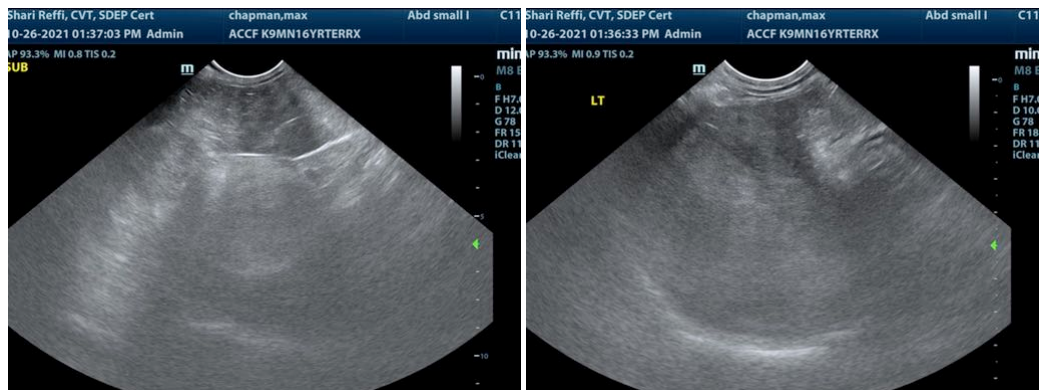
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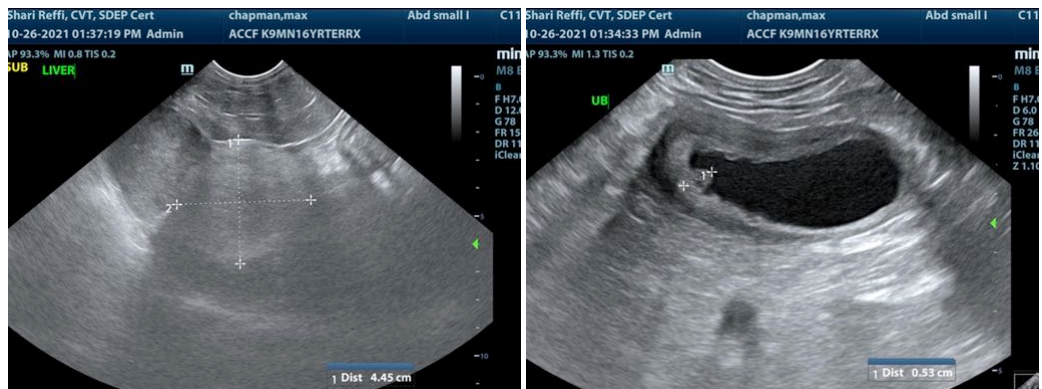
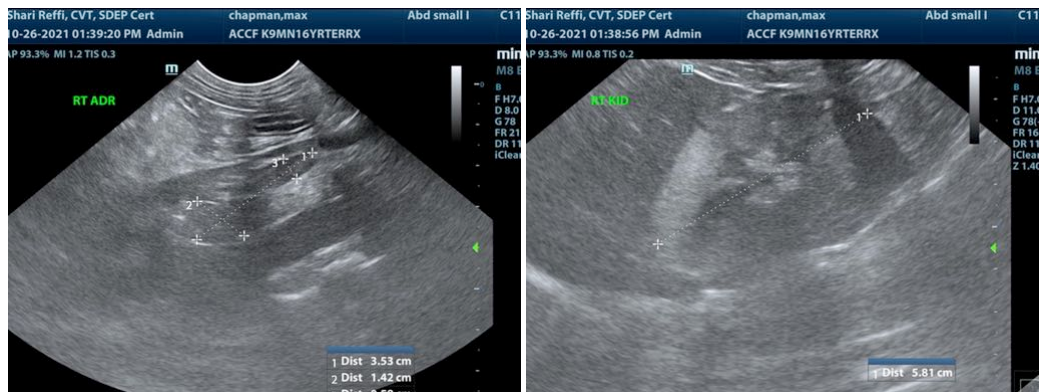
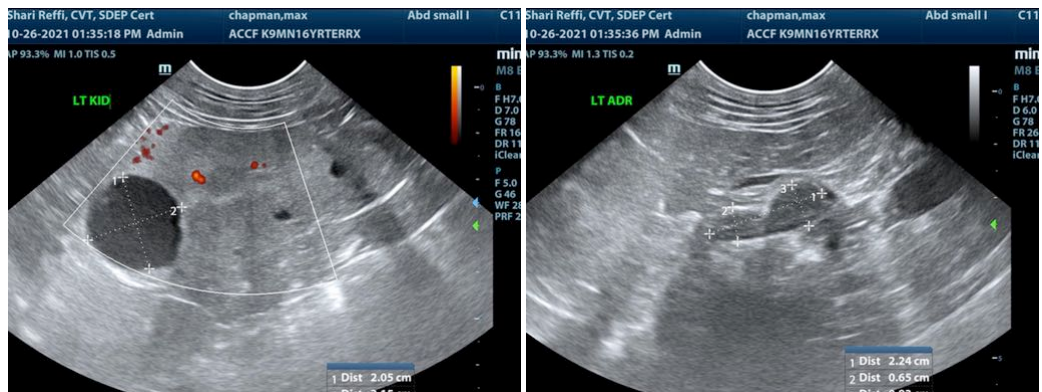
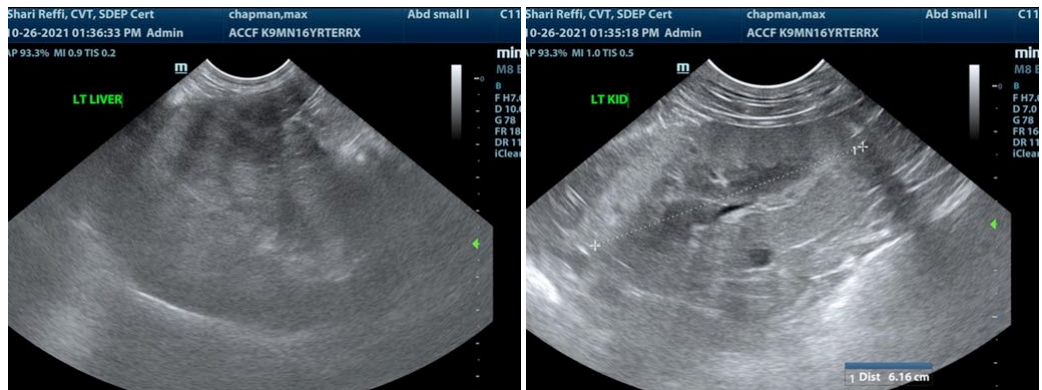
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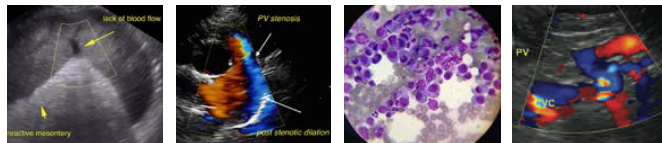
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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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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Terrier Mix

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Info@SonoPath.com

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