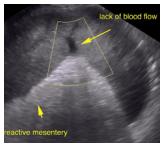
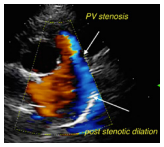
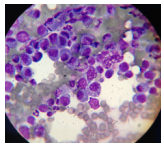
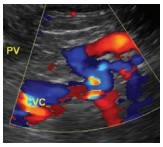
SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™





SonoPath.com
1-800-838-4268 info@sonopath.com

PATIENT

Chewie Mark-Moser

SPECIES

Feline

BREED

DSH

SEX

Neutered Male

AGE

3.5 Years

WEIGHT

3.6 Pounds

INTERPRETED BY

Eric Lindquist, DMV

DABVP, Cert. IVUSS

IMAGING PERFORMED BY

Dr. Schneck

HOSPITAL NAME

Willamette VH

REFERRING VET

Dr. Schneck

INVOICE

36762

DATE

4/8/22

PRESENTING CLINICAL SIGNS

Presented to WilVet 4/7/22: History of chronic kidney disease since at least March 2021 (started 2 yr ago). On 3/31 tsetined noted creatinine 2.3, BUN 43, normal phos 3.5), normal calcium (10.1), normal T4 (2.0). Historic neg FeLV/FIV, Bartonella. 3/31/22 CBC: leukocytosis 29.1 K/uL, 27 K neutrophilia with no bands noted. UA SG 1.023, 1+ protien, quiet sediment. UPC 0.5. Seen 3/31 at Corvallis cat for lethargy, diarrhea (a couple weeks), and urinating outside the litter box. Hid in closet. Bouts on/off dirarhea chronically. Will drink water outside. Drinking more water. Vomited. Temp 103.2 at this visit. Home with SQ fluids, B12, cerenia, mirtaz. Fecal OP/G negative. Senior screen (results above). Appetite continued to decline. Started eating dry but not wet. Amount began to shrink. Client has been keeping him inside. Progressively lethargic. Just laying there. No bowel movement since Sun - wil take a little when hand fed. Recheck 4/7/22. Not eat at all starting 4/3/22. Vomited on Sunday. Some sneezing in the last week. Historic heart murmur. Temp 104.5 at this visit. 4/7 triaged, started on IVF, labs collected FAST: Small amount of fluid cranial to bladder and just caudal to liver. 2/4. No other significant large lesions. PE: Unthrifty, cachexic lean mcs (2/3), with cat pot belly; Heart murmur, clear lungs Abnormal PE/Chem/CBC/UA Results: 4/8/22 CBC - leukocytosis 31.01, neutrophilia 12.83, lymphocytosis 15.3, monocytosis 2.72, eosinopenia 0.06, thrombocytopenia 134 Chem17 - creat 4, bun 86, hyperglobulinemia 5.2, elevated alt 235, tbil 4.6, alb/glob 0.5, phos wnl ***One study reported that 65% of 186 cats with FIP had an A:G ratio of <0.6. EPOC - hct 34, hypocalcemia 1.14, creat 4.21, hyperglycemia 148, bun 87 recheck FAST - 2/4 free fluid, unable to get sample whole body rads - decreased serosal detail, mild left>right renal mineralization 4a recheck EPOC - hct 27 (prev 34), hypocalcemia 1.01, creat 3.22 (prev 4.21) , bun 72 (prev 87), rest nsf 5a recheck FAST - mild increase in free abd flud, sample obtained Effusion Fluid Analysis: TP 5, A:G ratio 0.6, cytology - numerous nutrophils Analysis of effusions has a higher diagnostic value than serum tests in cases of wet FIP.3,4 Effusion is typically a modified transudate, with a viscous, straw-colored (Figure 4A) appearance. Protein level is high (>3.5 g/dL), with low to moderate cellularity (<5000 cells/µL; typically nonseptic, nondegenerate neutrophils, macrophages, and lymphocytes).3,23,24 A:G ratio can also be performed on effusions. One study using a threshold value of 0.6 demonstrated a sensitivity of 82% and a specificity of 80%.7 Fluid with A:G ratio <0.45; protein level of >3.5 g/dL; and low cellularity with predominantly neutrophils and macrophages is very consistent with FIP Urine C&S (collect vi cysto) to IDEXX - s Fluid analysis pending at OSU.

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. 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 pelvic urethra was imaged 3.0 cm beyond the cystourethral junction.

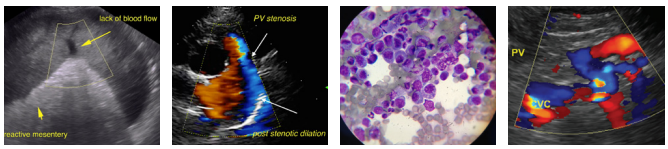
The **kidneys** revealed thickened, irregular cortices with pelvic calculi on the left. Minor pinpoint mineralization on the right. The left kidney measured 3.61 cm. The right kidney measured 3.45 cm. Cortical infarcts noted in the kidneys, possibly owing to stone movement.

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 0.35 cm.

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



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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** is mildly swollen with slight swollen with slight coarse architecture. Parenchyma was distinctly hypoechoic to falciform fat. Slight scalloping contour noted. Slight enhanced pericapsular mesentery.The gallbladder and common bile duct were unremarkable.

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

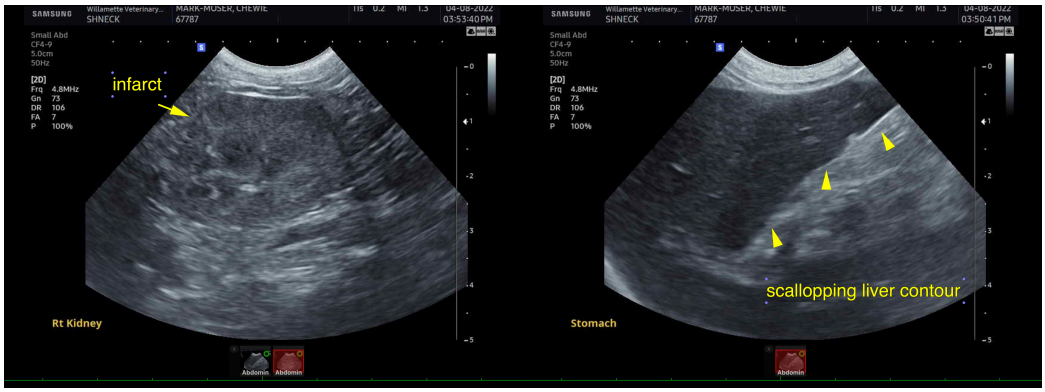
The base and limbs of the **pancreas** were observed to be largely isoechoic to surrounding omental fat. Pancreatic duct and capsular contour were acceptably normal and parenchyma respected normal curvilinear patterns. No overt evidence of active inflammatory or neoplastic disease was noted.

ULTRASONOGRAPHIC FINDINGS

- Irregular kidneys with infarcts and early degenerative changes
- Swollen liver with slight remodeling

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

No overt evidence of neoplasia. Cholangiohepatitis, infectious agents such as bartonella and toxoplasmosis should be considered. FIP is a mild potential as well as lymphoma. FNA of the liver indicated. Full urinary workup warranted if not already performed.



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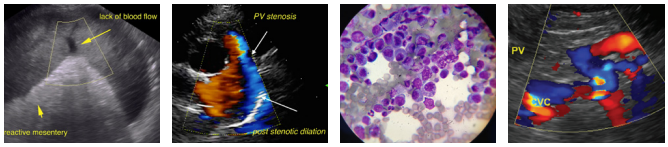

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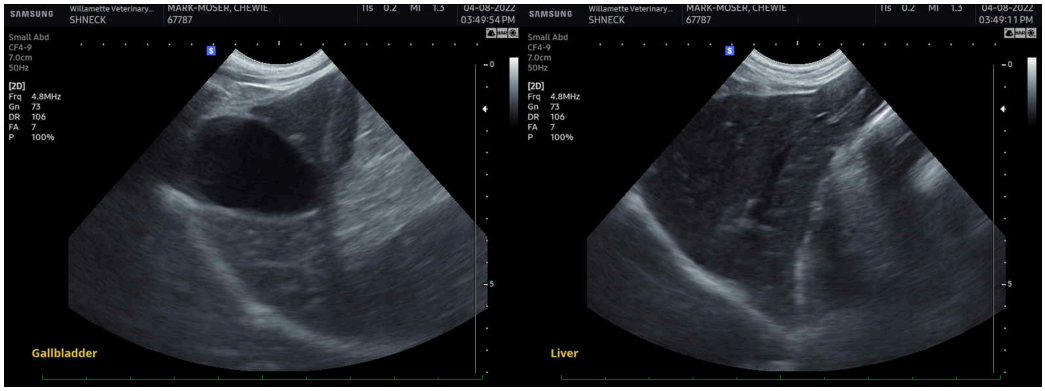

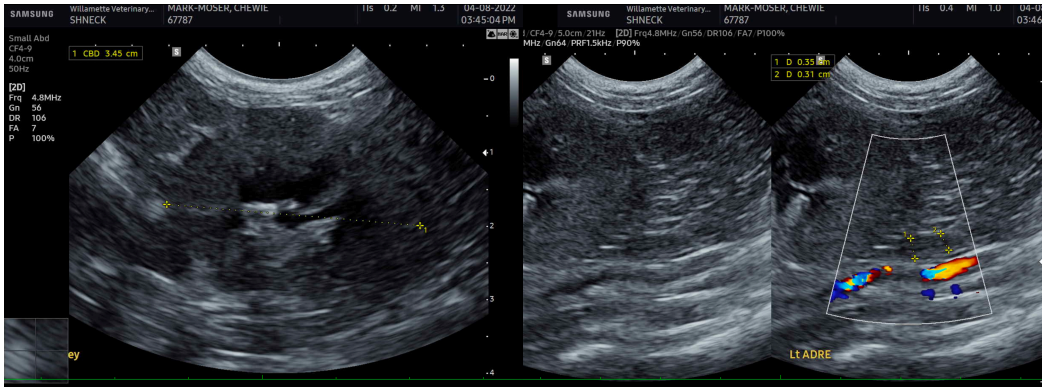

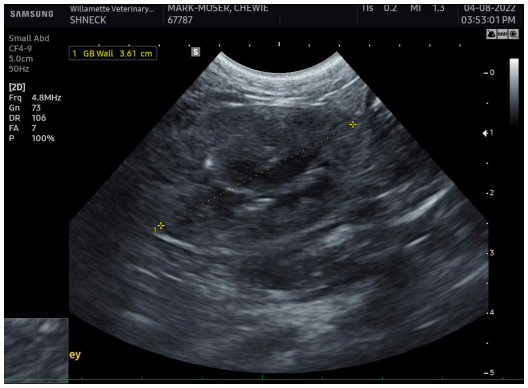

The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

Eric Lindquist, DMV, DABVP, Cert. IVUSS, CEO of SonoPath.com

info@SonoPath.com