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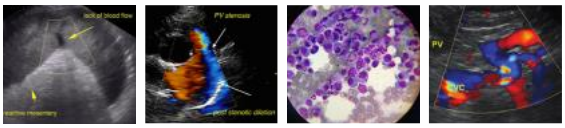


ANIMAL SOUNDS NW
MOBILE VETERINARY ULTRASOUND
IMAGING PERFORMED BY
AnimalSoundsNW.com 541-357-9423

PATIENT

Snow Smith

SPECIES

Feline

BREED

Siamese X

SEX

Neutered Male

AGE

15 Years

WEIGHT

7.8 Lbs.

INTERPRETED BY

Eric Lindquist, DMV, DABVP, Cert. IVUSS

HOSPITAL NAME

Cottage Grove VH

REFERRING VET

Dr. Damewood

INVOICE NUMBER

13598

DATE

1/24/22

PRESENTING CLINICAL SIGNS

History: History of cardiac disease. Recent weight loss, vomiting and diarrhea. Dehydrated, abdomen doughy.

Abnormal PE/Chem/CBC/UA Results: Elevated WBC on 1/12/22 (33,400, PCV 27.2%). Early IRIS stage 3 renal disease. Repeated CBC today: PCV 23.3%, WBC 10,280 Current Medications Vetmedin 1.25 1/2 BID, Mirtazepine topical, was on Baytril

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The **urinary bladder** and visible pelvic urethra were unremarkable for the level of repletion presented. The urine, however, did present some mildly echogenic debris consistent with mucous, exfoliated cells from renal or bladder origin, and/or blood clots as these echogenic changes can all present similarly. This is often related to urinary tract infection but may represent simple evidence of exfoliated debris or sterile inflammation. Cystocentesis, urinalysis, +/- culture would be recommended to rule out and define any UTI. This is a mild change.

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 moderate chronic interstitial nephritis yet infiltrative disease could not be entirely ruled out without biopsy though neoplasia is not suspected. The left kidney measured 3.61 cm. Idiopathic hyperechoic medullary rim sign was noted. The right kidney measured 4.64 cm.

Adrenal Glands

The **adrenal glands** were uniform, yet bilaterally swollen and hypoechoic. This is most consistent with stress-induced hyperplasia. The left adrenal gland measured 0.58 cm.

Spleen

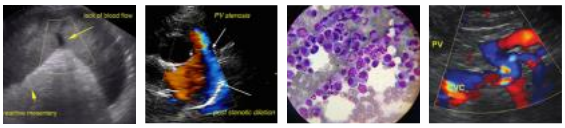
The **spleen** presented a smooth homogeneous parenchyma hyperechoic to liver and renal cortical parenchyma. The capsule was smooth without noticeable expansion or deviation from within the spleen or adjacent pathology. The splenic vasculature demonstrated normal volume without signs of congestion or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

Liver

The **liver** revealed irregular swelling and nodular changes, primarily in the caudal aspect of the right liver. The remainder of the liver was coarse in architecture with mild increased portal markings. The gallbladder and cystic duct were unremarkable.

Gastrointestinal

The **gastrointestinal** presentation revealed mild uniform prominence of the gastric mucosa as well as areas of "ropey" small intestinal wall. Muscularis/mucosal ratio was 1:1. The



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intestinal submucosa was slightly irregular, thickened and hyperechoic suggestive of low grade, chronic disease. No concerning lymphadenopathy was visible. No evidence of obstruction was present. Chronic inflammatory bowel disease is likely with a low possibility of an early neoplastic event such as lymphoma. Full thickness tissue biopsies via open laparotomy, ideally guided by intraoperative ultrasound in order to obtain the most representative mural sample, would be necessary to rule out this possibility. Regional intestinal lymph nodes were enlarged, reactive.

Pancreas

The **pancreas** revealed coarse architecture, microcystic changes and undulating pancreaticoduodenal vein. A history of pancreatitis is likely.

ULTRASONOGRAPHIC FINDINGS

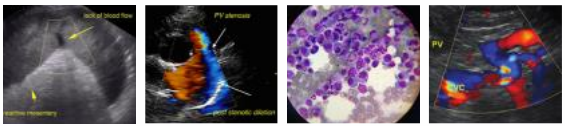
- Right sided liver nodules. Pronounced hyperplasia, cystadenomas, emerging carcinoma possible.
- Diffuse intestinal thickening
- Urinary bladder debris
- Chronic interstitial nephrosis renal pattern
- Adrenal stress
- Chronic active pancreatitis pattern

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

There are multiple issues in this patient, however, I'm most concerned about long term viability of the kidneys and diffuse intestinal thickening with chronic active pancreatitis. None of the presentations have completely met neoplastic criteria, however, emerging intestinal neoplasia (such as lymphoma) could not be completely ruled out. CBC path review warranted. Maldigestion panel, three view chest radiographs and full CNS examination is recommended to examine for occult disease that could be responsible for the weight loss. Evaluation for competitive eating environments should also be considered. Diet change to geriatric hydrolyzed diet warranted. A clinical trial of the following may prove effective from an empirical standpoint. Prognosis is guarded.

Triaditis/Pancreatitis protocol

Part or all of this protocol may be considered based on your clinical impression of the patient: Recommend pain management when anorexic with **Buprenorphine** (0.01-0.02 mg/kg IM or SC), clinical trial of **Zithromax** (50 mg sid/cat x 10 days, 3 weeks if bartonella +), **Prednisolone** (0.5-2 mg/kg tapering over 1 week to minimal effective dose), and **B12 injections** if weight loss (Cyanobalamine 250 mcg sub-q once-weekly x six weeks, then every other week for six weeks and then once-monthly, long-term if necessary), **novel-protein or hydrolyzed diet (***Hydrolyzed diets have been shown to be more effective in dietary intolerance case management compared to hypoallergenic diets***)** or the **magical Purina DM** (changing protein source is crucial and may need rotation every 6 months if clinical signs recur) Diet trials is a whatever works phenomenon. If vomiting becomes a persistent issue then endoscopy would be warranted and/or recheck sonogram to assess more emerging disease.



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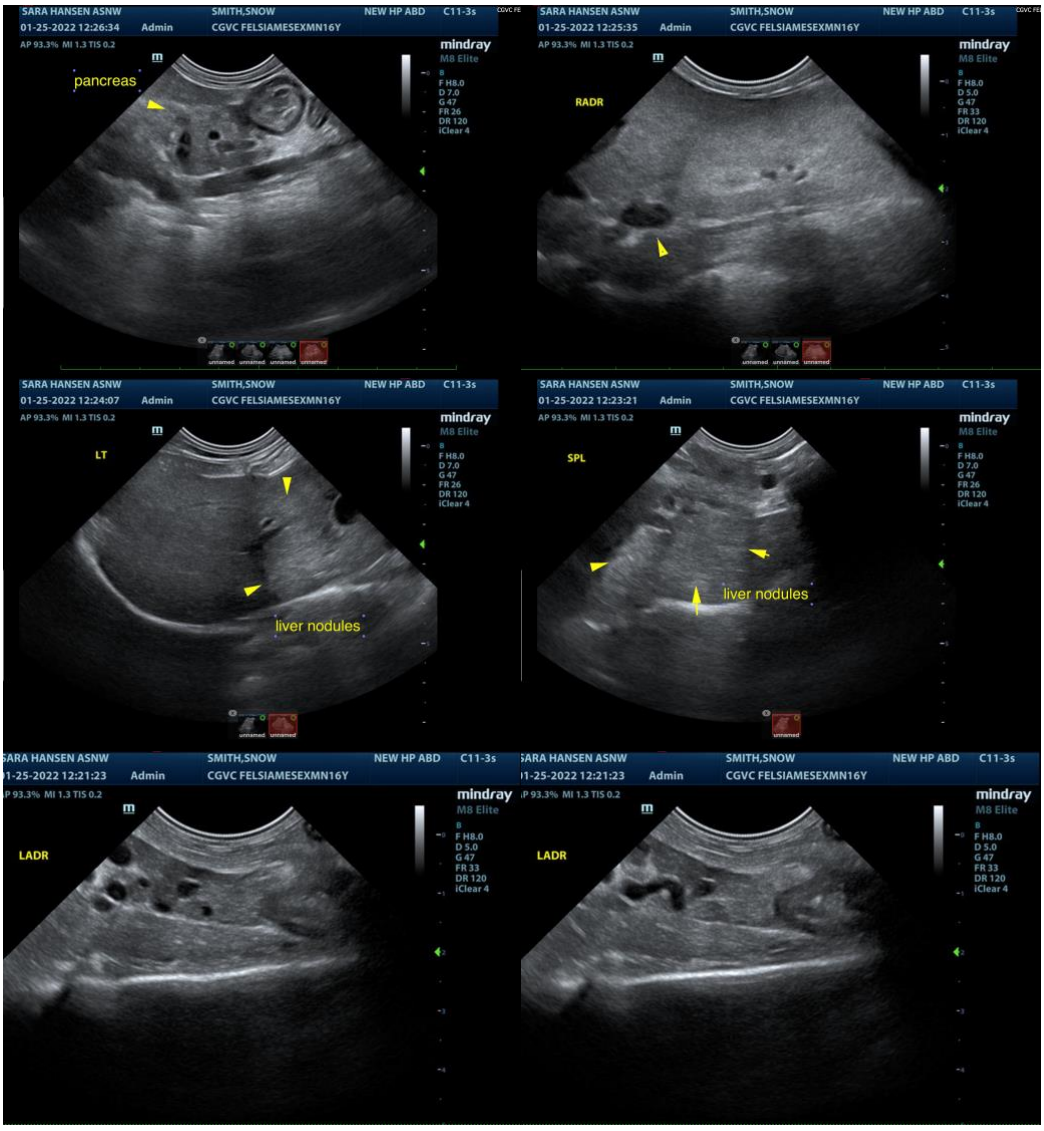
One diet does not work for all patients so different trials may be necessary or protein source rotation every 6 months as new sensitivities develop.



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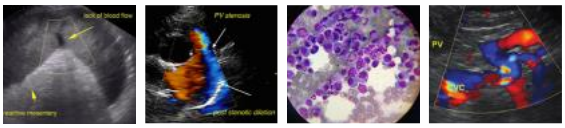

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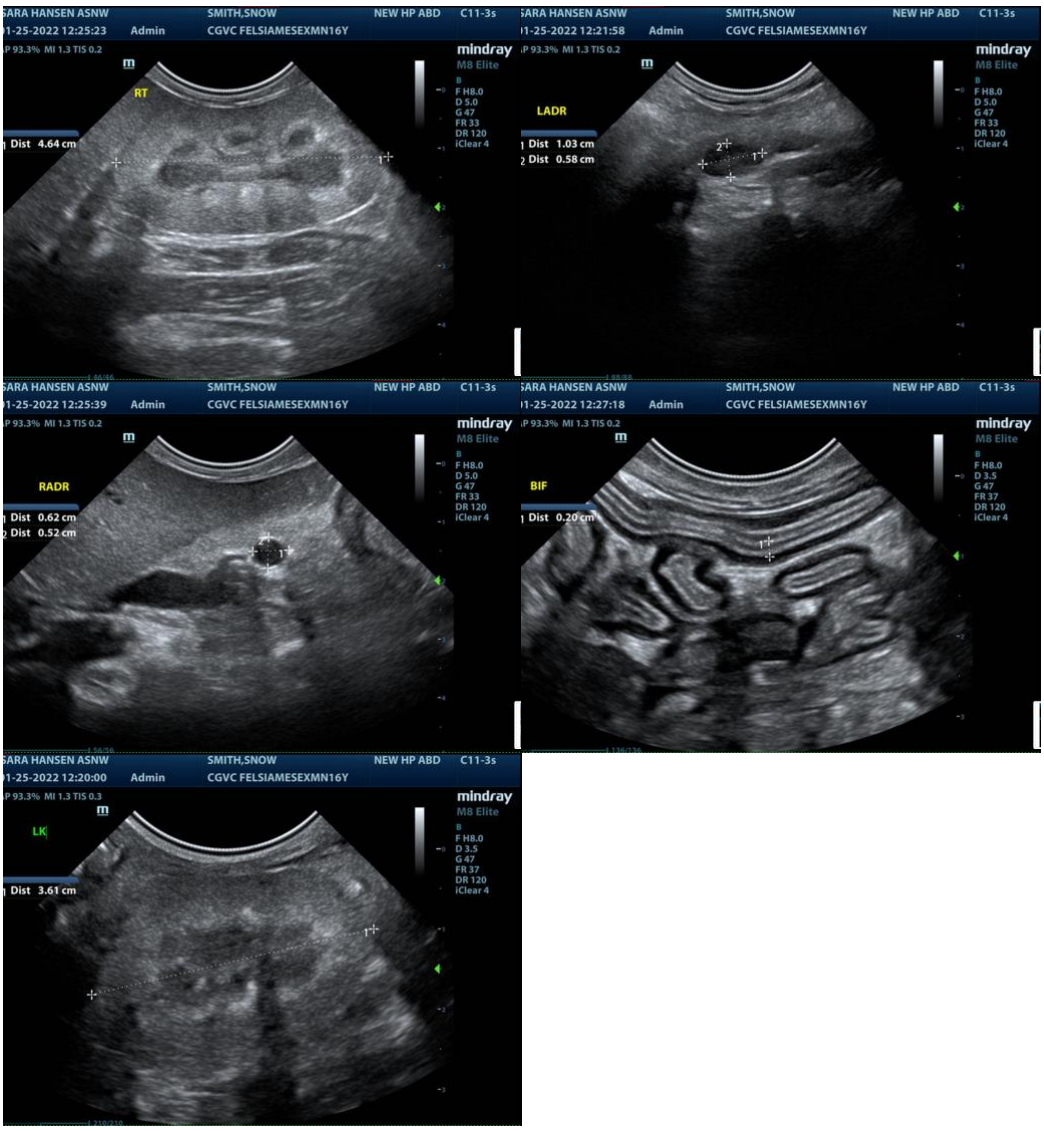

The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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
Eric.Lindquist@SonoPath.com

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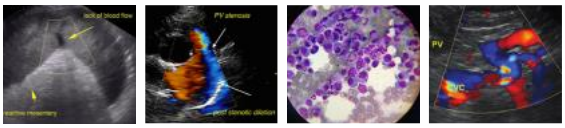

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