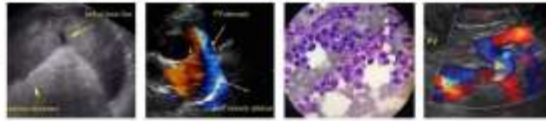

PATIENT

Murphy Brown Frederiksen

SPECIES

Canine

BREED

Labrador Retriever

SEX

FS

AGE

10 years

WEIGHT

42.3 kg

INTERPRETED BY

R. McKenzie Daniel, DVM, DABVP

IMAGING PERFORMED BY

Crystal Hill

HOSPITAL NAME

Main Street AH

REFERRING VET

Dr. Brochu

INVOICE

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PRESENTING CLINICAL SIGNS

Presented as emergency exam Jan 11, 2022 for ongoing oral pain - not chewing food well, decreased appetite On physical exam no major findings, moderate dental disease but no abnormal findings in mouth. Routine bloodwork recommend to rule out systemic, renal, hepatic, neoplastic diseases (sample collected Jan11, results jan 12) Jan 13 - admitted for IV fluids and UA on first morning urine Jan 14 - distended abdomen, prominent mucosal capillaries in oral cavity, subjective very mild icteric sclera - still very quiet. Lactated ringers, ampicillin, baytril, cerenia, sulcrate
Abnormal PE/Chem/CBC/UA Results: Please see attached. Blood from Jan 11 (reported jan 12) - Mild non-regenerative anemia - SDMA 39(0-14), creat 423 (44-133), urea 44.3 (3.2-11.0), lipase 275 (0-250) In-house urinalysis - USG 1.016 - Protein on dip stick 2000+ - WBC 21-30/hpf - RBC 4-10/hpf - course granular casts 1-10/hpf Repeat in-house bloodwork Jan 14 (Has been on IV fluids in hospital 8 hrs Jan 13 and 4 hours Jan 14. O gave steak and ground chicken as food overnight) - Moderate non-regenerative anemia - SDMA mildly improved, urea and creat increased Rads:Loss of visceral detail, dorsal displacement of the small intestine by variable opacity mass-like structure ventral abdomen (spleen?), rounded margins liver with suspected nodules, disrupted axis of stomach.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of 2.0 cm exhibited normal thickness and tone. Anechoic urine was present in the lumen with no uroliths or sediment. The ureteral papillae were normal. The ureters were not visible which is normal. No evidence of inflammatory or neoplastic changes was noted.

The area of the aortic trifurcation was free of pathology.

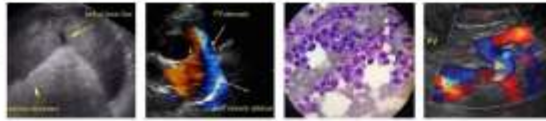
Normal size and margination were present in the kidneys. A normal 1:3 cortex / medulla ratio was maintained. The medulla and cortices were uniform in texture with some increased echogenicity and mild to moderate loss of corticomedullary symmetry and definition expected for the age of the patient. No evidence of pyelectasia was present. The left kidney measured 6.1 cm in length. The right kidney measured 6.7 cm in length.

Adrenal Glands

The left adrenal gland exhibited asymmetrically marginated, nonhomogeneous mass exhibiting focal hyperechoic parenchyma. The potential for vascular invasion associated with the left adrenal mass cannot be excluded. The left adrenal mass measured 5.0 cm x 3.3 cm. The right adrenal gland was indistinctly visualized, subjectively measuring 0.87 cm width at the caudal pole.

Spleen

The spleen exhibited subjective potential for mild generalized enlargement with asymmetrical medial capsule contour. Generalized parenchyma heterogeneity with multifocal, variably sized to variably echogenic intraparenchymal nodules were present. An example of a hyperechoic nodule measured 1.5 cm in diameter. A solitary, nonhomogeneously hypoechoic nodule present in the lateral splenic



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parenchyma measured approximately 3.2 cm in diameter. This nodule appeared to mildly distort the splenic capsule yet was without evidence of parenchymal escape.

Liver/ Gallbladder

The liver was subjectively normal in size, structure, and contour. The liver parenchyma was mildly nonuniform and hypoechoic to the spleen with a moderate coarse echotexture and subjective mild to benign parenchymal remodeling. The hepatic and portal vasculature were normal in appearance without signs of congestion. Moderate, nondependent yet nonorganized, mildly congealed gallbladder debris was present without evidence of gallbladder or peripheral inflammation. The cystic and common bile ducts were normal.

Gastrointestinal

The stomach presented intact wall layering with a normal wall layer ratio. The lumen of the stomach was empty with no signs of ileus, obstruction, or foreign material.

The small intestine presented intact wall layering with 1:3 muscularis/mucosa ratio. The lumen of the small intestine was empty with no signs of ileus, obstruction, or foreign material.

Normal visible colon wall layers were present with apparent formed feces in lumen.

Pancreas

The parenchyma of the left limb, body, and right limb of the pancreas presented isoechoic to the adjacent omental fat. A normal curvilinear capsule contour of the pancreas was present. The visible pancreatic duct was normal. No signs of active inflammation or neoplastic disease were evident.

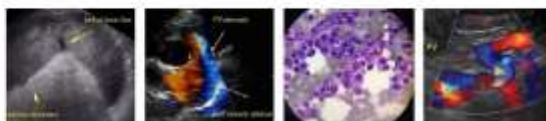
Free Abdomen

No overt lymphadenopathy or peritoneal effusion was present. A solitary, mildly nonhomogeneous to echogenic, primarily uniform mass in the ventral abdomen and potentially lateral to the spleen, measuring approximately 11.0 cm x 4.5 cm, was present. The mass exhibited opacity subjectively between fat and soft tissue. The mass did not appear to originate from the spleen.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- Left adrenal mass - suggestive of neoplastic criteria such as pheochromocytoma, adenocarcinoma, or other, potential for significant hyperplasia or adenomatous change possible yet thought less likely
- Mild to moderate nonspecific chronic renal changes
- Variably echogenic splenic nodules - myelolipomas, nodular hyperplasia, acute to chronic infarction, or emerging neoplastic nodule possible
- Hepatic parenchymal remodeling - subjectively benign
- Moderate, congealed yet nonorganized gallbladder debris (non-mucocele)
- Suspect large intraabdominal lipoma - not overtly suggestive of neoplastic criteria



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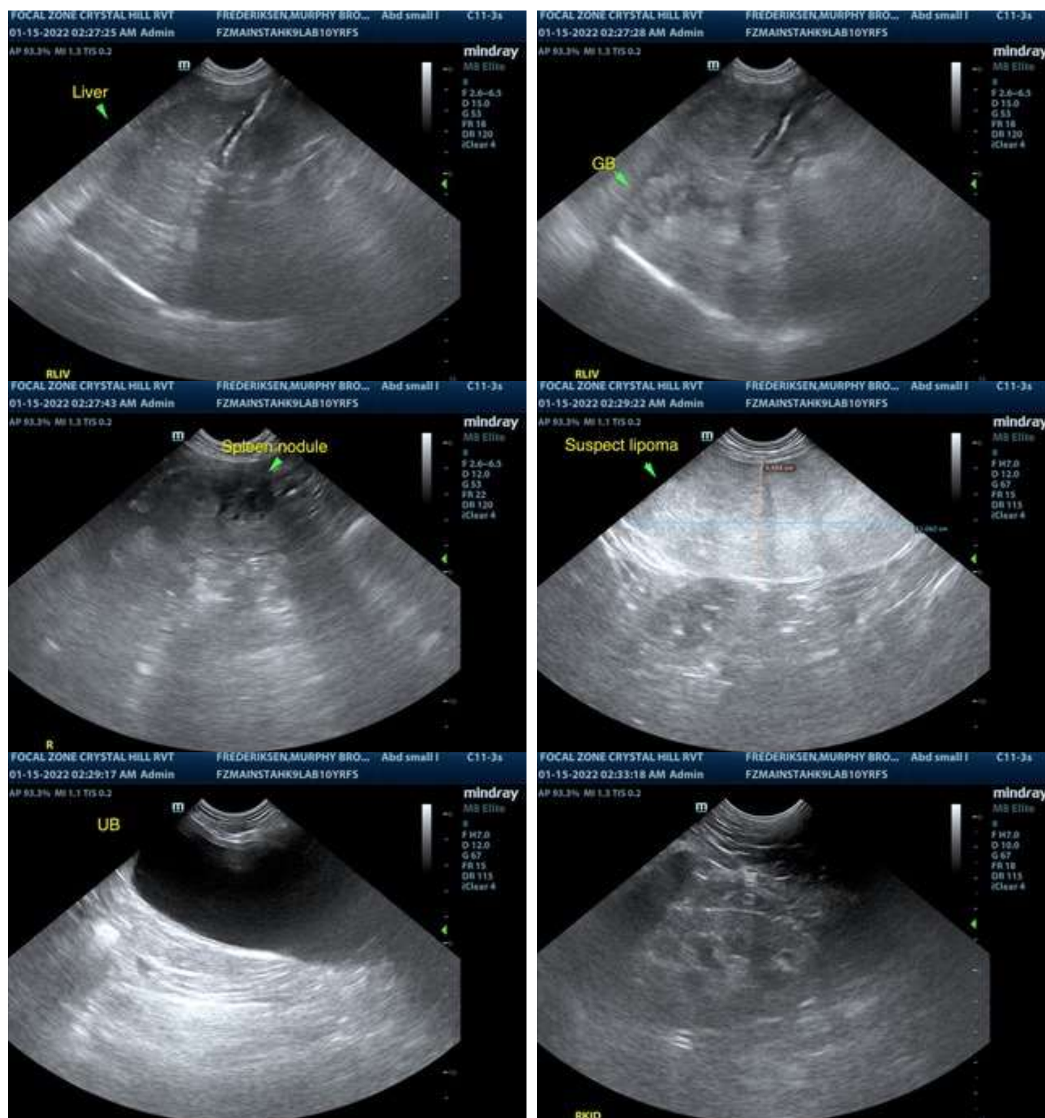
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Screening blood pressure and / or, if clinically indicated, full adrenal workup could be considered.

Subjectively, the kidneys did not appear to be end-stage. However, given the presence of anemia, the potential for structurally insignificant yet advanced chronic renal disease is possible. Alternatively, consider potential for acute on chronic renal insult such as Leptospirosis / infectious disease, toxin or other.

Assuming normal clotting status, ultrasound-guided FNA of the nonhomogeneously hypoechoic splenic nodule using a 25-gauge needle is warranted for screening cytology. Sonographic monitoring of the left adrenal mass and splenic nodules would be a more conservative approach.

Continued monitoring for evidence of increasing Icterus is suggested. Likewise, ultrasound FNA of the suspected intraabdominal lipoma for confirmation vs. other nonspecific tissue could be considered.



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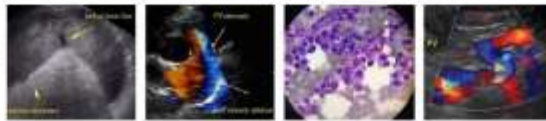

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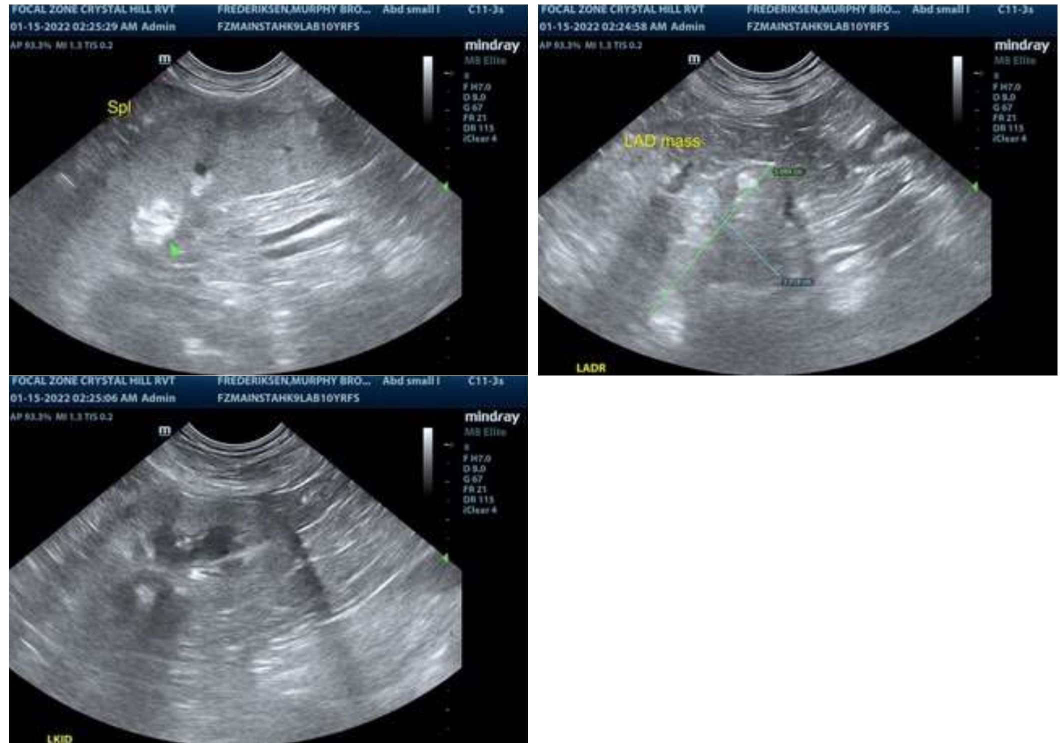

The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

R. McKenzie Daniel, DVM, DABVP (Canine / Feline Practice)
info@SonoPath.com