



PATIENT

Emma Lancaster

SPECIES

Canine

BREED

Rat Terrier

SEX

FS

AGE

12 years

WEIGHT

23 lbs.

INTERPRETED BY

R. McKenzie Daniel,
DVM, DABVP
(Canine and Feline)

IMAGING PERFORMED BY

Jenna Walsh, CVT

HOSPITAL NAME

Santa Clara AH

REFERRING VET

Dr. Brasted-Maki

INVOICE

13653

DATE

4/13/22

PRESENTING CLINICAL SIGNS

Patient has a chronic history of intermittently poor appetite and "sensitive stomach". In the last few months these signs have worsened exponentially. Patient has been diagnosed with chronic renal disease based on labwork and pancreatitis based on abnormal spec cPL and consistent clinical signs. She also has chronically elevated liver enzymes. Multiple exams done over the last few weeks show a patient who is at times weak, depressed, dehydrated, and has abdominal pain. At other times exam is fairly unremarkable.

Abnormal PE/Chem/CBC/UA Results: Most recent chem panel on 4-7-22: Chem 10: Creat is 3.1, increased from 2.1; BUN is 80, increased 40. ALP is 1272, compared to 1359. PCV 46% Kidney values rechecked 4-12-22: BUN 44, Creat 2.5 Current Medications Metronidazole, Cerenia, Urosdiol, Mirtazapine, Tramadol prn. Radiographic Findings Abdominal radiographs taken last month were unremarkable.

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. No evidence of uterine remnant pathology was noted.

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 moderate loss of corticomedullary symmetry and definition expected for the age of the patient. Mild pyelectasia was noted in both kidneys. The left kidney measured 4.0 cm in length. The right kidney measured 4.4 cm in length.

Adrenal Glands

The left adrenal gland exhibited mild symmetrical caudal pole enlargement without evidence of parenchymal mineralization of overt nodules / masses. Mild parenchyma heterogeneity was present without suspicion for overt neoplasia. The left adrenal gland measured 2.2 cm length x 0.82 cm width at the caudal pole.

The right adrenal gland was normal in size. Mild parenchyma heterogeneity and mild capsule asymmetry was present without suspicion for overt neoplasia. The right adrenal gland measured 2.5 cm length x 0.59 cm width at the caudal pole.

Spleen

The spleen exhibited primarily finely textured and homogenous parenchyma which was hyperechoic to the liver and renal cortical parenchyma. Multifocal, well-defined, symmetrical, non-expansive



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|----------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PATIENT | echogenic nodules were present throughout the medial parenchyma primarily around the hilus. The capsule was smooth and regular without apparent expansion. An example of the nodules measured 0.63 cm in diameter. The splenic vasculature at the hilus was normal in volume with no evidence of congestion or thrombosis. Acute to chronic inflammatory or neoplastic changes were not noted. The echogenic nodules tend to trend benign and are most consistent with benign hyperplasia or myelolipomas. |
| Emma Lancaster | |
| SPECIES | |
| Canine | |
| BREED | <i>Liver/ Gallbladder</i> |
| Rat Terrier | The liver presented enlarged in size. The parenchyma of the liver was subjectively normal in echogenicity compared to the spleen and renal cortices. The liver parenchyma was uniform with a mildly coarse echotexture. The capsule of the liver was symmetrically rounded to mildly swollen in margination. The hepatic and portal vasculature were normal in appearance without signs of congestion. The gallbladder was mildly distended containing primarily anechoic content with moderate congealed yet nonorganized luminal debris primarily in the mid to cranial lumen. The gallbladder walls were sonographically normal without evidence of inflammatory changes or criteria. No evidence of peripheral gallbladder inflammation was noted. The common bile duct was normal. |
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| WEIGHT | <i>Gastrointestinal</i> |
| 23 lbs. | 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. |
| INTERPRETED BY | 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. |
| R. McKenzie Daniel, DVM, DABVP (Canine and Feline) | Normal visible colon wall layers were present with apparent formed feces in lumen. |
| IMAGING PERFORMED BY | <i>Pancreas</i> |
| Jenna Walsh, CVT | The pancreas was normal in size and contour with isoechoic to heterogeneous parenchyma compared to adjacent omentum. No signs of active inflammation or neoplasia. |
| HOSPITAL NAME | <i>Free Abdomen</i> |
| Santa Clara AH | No omental masses, lymphadenopathy or peritoneal effusion were present. |
| REFERRING VET | ULTRASONOGRAPHIC FINDINGS |
| Dr. Brasted-Maki | <ul style="list-style-type: none"> • Moderate chronic renal changes with bilateral pyelectasia • Mild caudal left adrenomegaly - nonspecific • Benign hepatopathy - suggestive of vacuolar hepatopathy given the ALP elevation with nonobstructive cholestasis • Moderate congealed gallbladder debris (non-mucocele) • Subtle heterogeneous pancreas |
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INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The pyelectasia in both kidneys may be owing to chronic renal changes, potential pelvic scarring possibly owing to previous calculi passage, IV fluid therapy (if applicable). Urine C/S and protein:creatinine ratio on sterile urine sample is recommended.

The mildly enlarged caudal left adrenal gland exhibiting symmetrical capsule contour and without evidence of nodular or neoplastic criteria was nonspecific with considerations including age-related or patient variant, mild to emerging adenomatous change, and benign caudal hyperplasia. Screening blood pressure is recommended to assess for evidence of hypertension which may allude to the possibility of emerging left adrenal pathology. However, although this finding is nonspecific, sonographic monitoring of the left adrenal gland could be considered for evidence of progressive caudal enlargement.

The pancreas is suggestive of age-related pancreatic changes, although low-grade to chronic pancreatitis, which may present as essentially sonographically normal, could be possible.

The potential for structurally insignificant gastroenteropathy cannot be definitively excluded. Empirically, 24-hour hospitalization with IV fluids, gastrointestinal support, and monitoring of renal and clinical response may prove beneficial.

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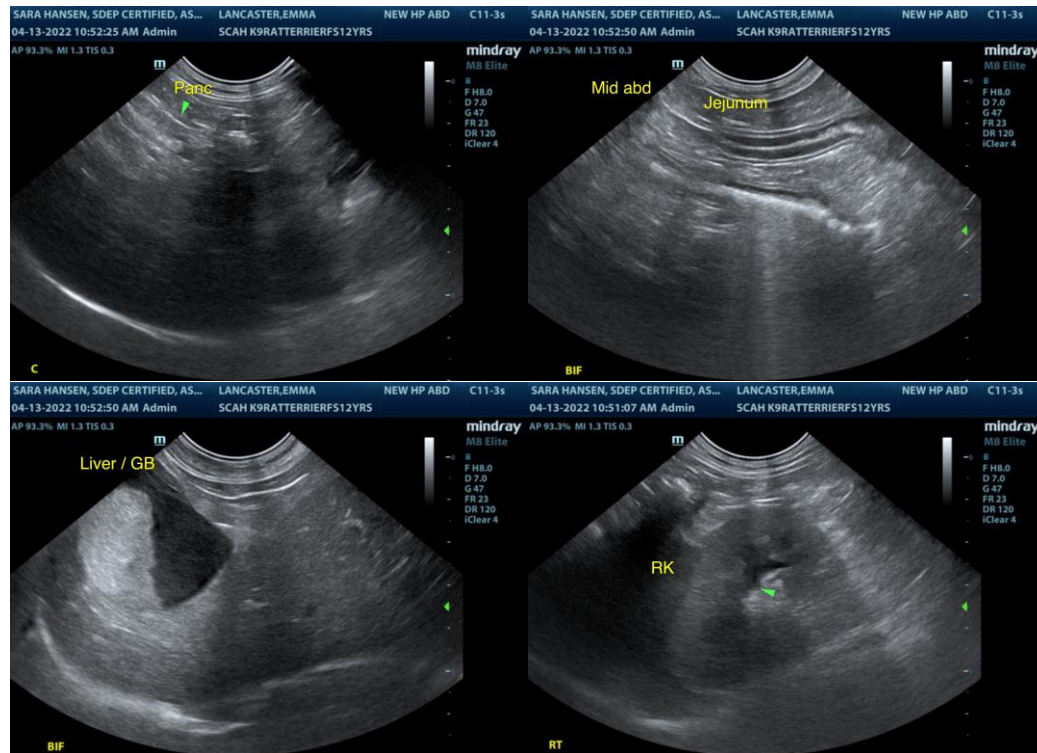
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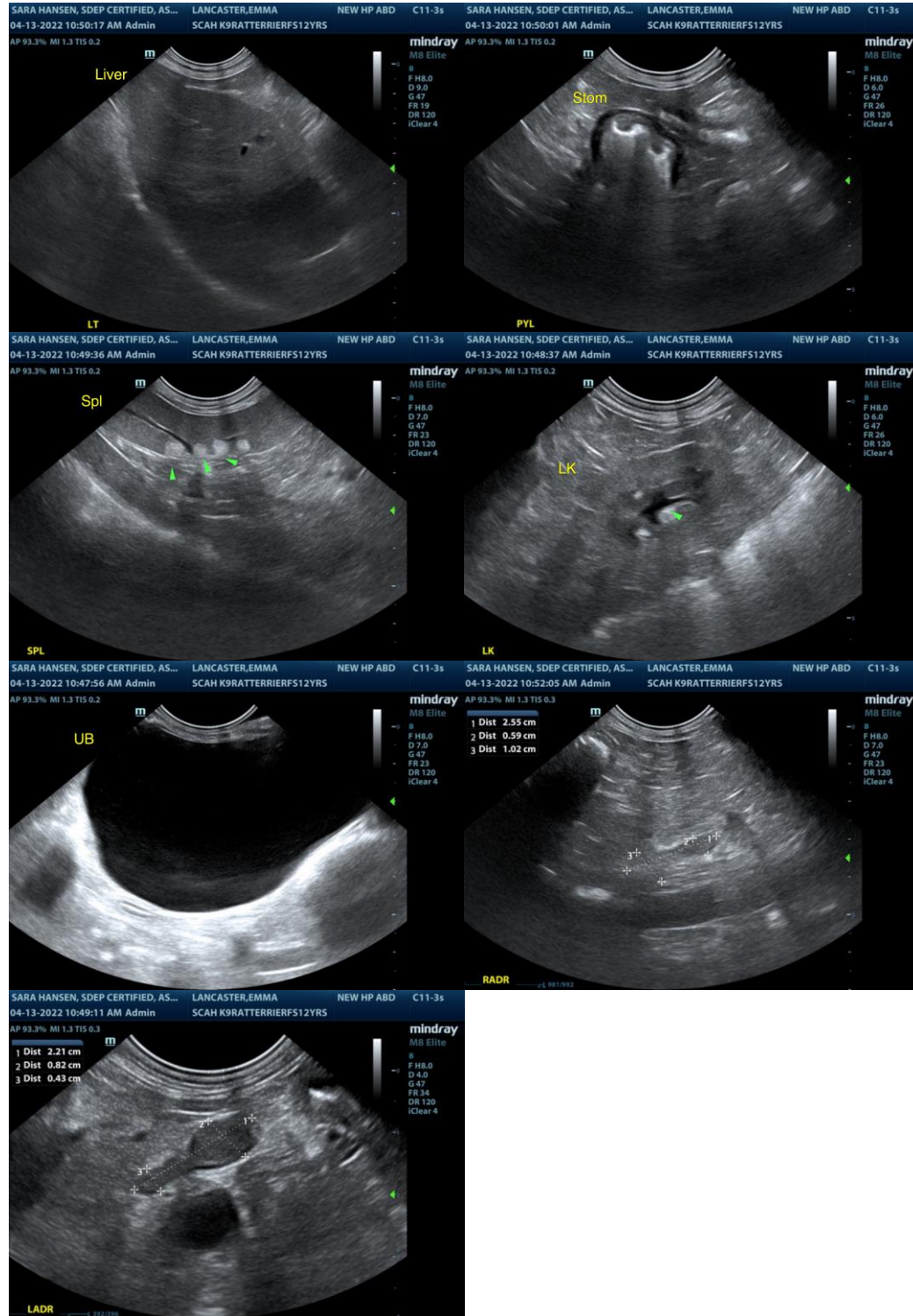
Dr. Brasted-Maki

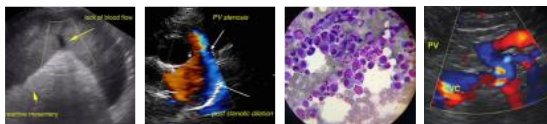
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

SPECIES

Canine

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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info@SonoPath.com

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