



PATIENT

Frankie Miller

SPECIES

Canine

BREED

Chihuahua

SEX

MN

AGE

11 years

WEIGHT

14.24

INTERPRETED BY

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

IMAGING PERFORMED BY

Dr. Lucas Budden

HOSPITAL NAME

Frontier Veterinary
Hospital

REFERRING VET

Dr. Lucas Budden

INVOICE

13343

DATE

2/14/22

PRESENTING CLINICAL SIGNS

Seen 1/27/2022 for an annual exam. Had a new SC mass. overweight (owner had been struggling to control weight), and gagging coughing occasionally throughout the day. ALP elevated at 3344 (previously 1163 in June 2021).

Abnormal PE/Chem/CBC/UA Results: 1/27/2022 CBC/Chem/T4 ALP 3344 Cholesterol 1197 (29-291) PSL WNL T4 WNL 0.8 fT4 WNL 18

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder was mildly subnormal in size owing to lack of urine distention, yet normal tone and without evidence of pathology.

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 loss of corticomedullary symmetry and definition expected for the age of the patient. Focal areas of nonobstructive medullary mineral were present. No evidence of pelvic dilation was present. The left kidney measured 4.0 cm in length. The right kidney measured 3.8 cm in length.

Adrenal Glands

The left adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 0.52 cm width at the caudal pole and 0.50 cm width at the cranial pole. The right adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The right adrenal gland measured 0.47 cm width at the caudal pole and 0.46 cm width at the cranial pole. No overt hyperplasia or tumors were noted.

Spleen

The spleen exhibited primarily finely textured and homogenous parenchyma which was hyperechoic to the liver and renal cortical parenchyma. Multifocal, well-defined, symmetrical, echogenic nodules were present primarily in the medial parenchyma around the hilus. Some of the nodules appeared to be coalescing. The capsule was smooth and regular without apparent expansion. 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.

Liver/ Gallbladder

The liver exhibited potential for mild generalized enlargement. 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. Solitary, uniform, well-demarcated, mildly hyperechoic intraparenchymal nodule was present measuring 0.56 cm in diameter. 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 non-distended in size with mild, nondependent, mobile gallbladder debris. The cystic and common bile ducts were normal.



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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. Mild intermittent segmental nonspecific mucosal speckling was present. The jejunum wall width measured 0.25 cm. The duodenum wall width measured 0.41 cm.

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

Pancreas

The pancreas was normal in size and contour with isoechoic to heterogeneous parenchyma compared to adjacent omentum. No signs of active inflammation or neoplasia.

Free Abdomen

No overt lymphadenopathy or peritoneal effusion was present. Subjectively increased amount of Intra-abdominal fat was present.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- Benign splenic nodules - consistent with myelolipomas, previous infarction, nodular hyperplasia, potential for emerging mineralization
- Hepatopathy with solitary benign nodule - nodule although nonspecific is most consistent with probable small lipogranuloma or focal nodular hyperplasia, vacuolar hepatopathy and potential for nonobstructive cholestasis suspected given ALP elevation and presence of gallbladder debris
- Mild gallbladder debris (non-mucocele)
- Bilateral chronic renal changes with nonobstructive medullary mineral

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Given the lack of reported clinical signs, underlying adrenal disease is considered unlikely. However, if clinically indicated, screening UCCR could be considered.

Hepatosupportive medications including Denamarin and Ursodiol may prove beneficial.



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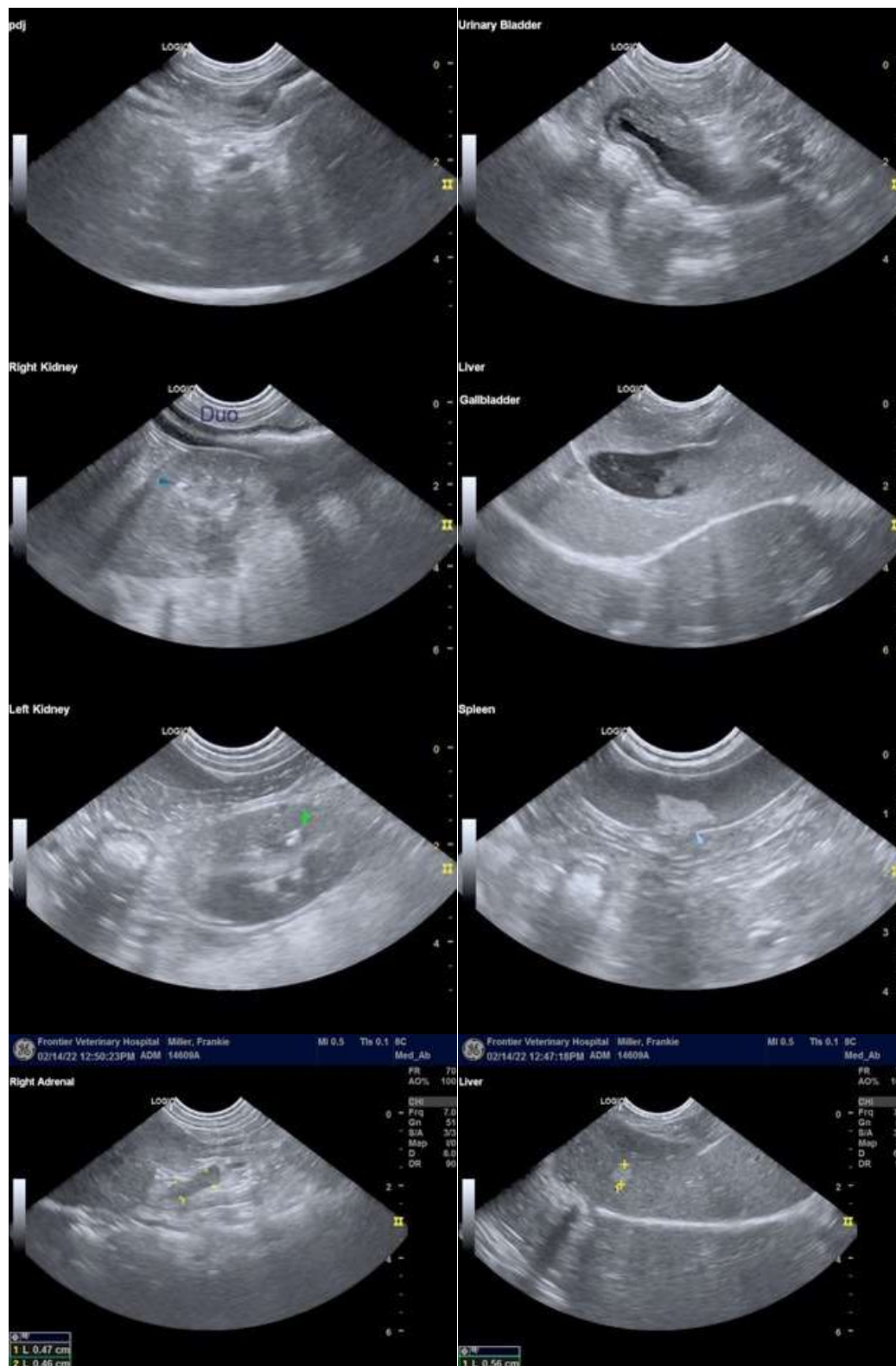
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

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