



PATIENT

Marley Blanco

SPECIES

Canine

BREED

Chihuahua Mix

SEX

FS

AGE

13 years

WEIGHT

10.09 lbs.

INTERPRETED BY

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

IMAGING PERFORMED BY

Jasmine Palacios

HOSPITAL NAME

Rivers Edge PMC

REFERRING VET

Dr Bridget Hayes

INVOICE

13180

DATE

1/26/22

PRESENTING CLINICAL SIGNS

PU/PD, panting and increased appetite x 1 month Thin wrinkly skin, gained weight P currently on denamarian and methocarbamol

Abnormal PE/Chem/CBC/UA Results: See attached bloodwork: elevated ALT, TBili, BUN, globulin
See attached radiographs: normal heart size, large liver

CBC- thrombocytosis, Platelets 733, BUN 30, ALT 326, TBili 1.0, Urine specific gravity 1.020, negative glucose, minor proteinuria

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of 3.0 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 loss of corticomodullary symmetry and definition expected for the age of the patient. Focal, nonobstructive medullary mineral was noted in the left kidney. Focal caudal lateral cortical infarction was present in the right kidney. No evidence of pelvic dilation was present. The left kidney measured 3.5 cm in length. The right kidney measured 3.6 cm in length.

Adrenal Glands

The bilateral adrenal glands were mildly prominent in size. The adrenal glands exhibited generalized nonhomogeneous parenchyma with homogeneous nodules in the left and right cranial parenchyma. The left adrenal gland overall measured 0.84 cm width at the cranial pole and 0.57 cm width at the caudal pole. The nodule in the cranial left adrenal gland measured 0.44 cm x 0.40 cm. The right adrenal gland overall measured 0.68 cm width at the cranial pole and 0.68 cm width at the caudal pole. The nodule in the cranial right adrenal gland measured 0.56 cm x 0.36 cm. No evidence was noted of capsule distortion, parenchymal escape, or overt vascular invasion.

Spleen

The spleen exhibited primarily finely textured and homogenous parenchyma which was hyperechoic to the liver and renal cortical parenchyma. Small echogenic nodules were present throughout the cranial to caudal parenchyma. 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 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



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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 non-distended in size with mild, nonorganized, nonmineralized gallbladder debris. The gallbladder debris was primarily around the inner luminal surface. No evidence of gallbladder or peripheral inflammation was noted. 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.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- Benign splenic nodules - consistent with probable myelolipomas, nodular hyperplasia, or emerging mineralization
- Hepatomegaly - subjectively benign
- Mild gallbladder debris (non-mucocele)
- Bilateral prominent adrenal glands with nonspecific nodules
- Mild chronic renal changes with nonobstructive renal mineralization and right kidney cortical infarction

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Full adrenal workup including LDDST in light of the patient's clinical signs, thrombocytosis, and borderline decreased urine specific gravity, is recommended. The bilateral adrenal nodules were nonspecific with considerations including functional vs. nonfunctional adenoma, hyperplasia, lipogranuloma, or possible emerging neoplasia such as adenocarcinoma, pheochromocytoma, or similar.

Screening blood pressure is recommended. Ultrasound guided FNA of the liver pending adrenal testing and assuming normal clotting status, could be considered for screening cytology if clinically indicated. Hepatosupportive medications including Denamarin and Ursodiol may prove beneficial. Sonographic



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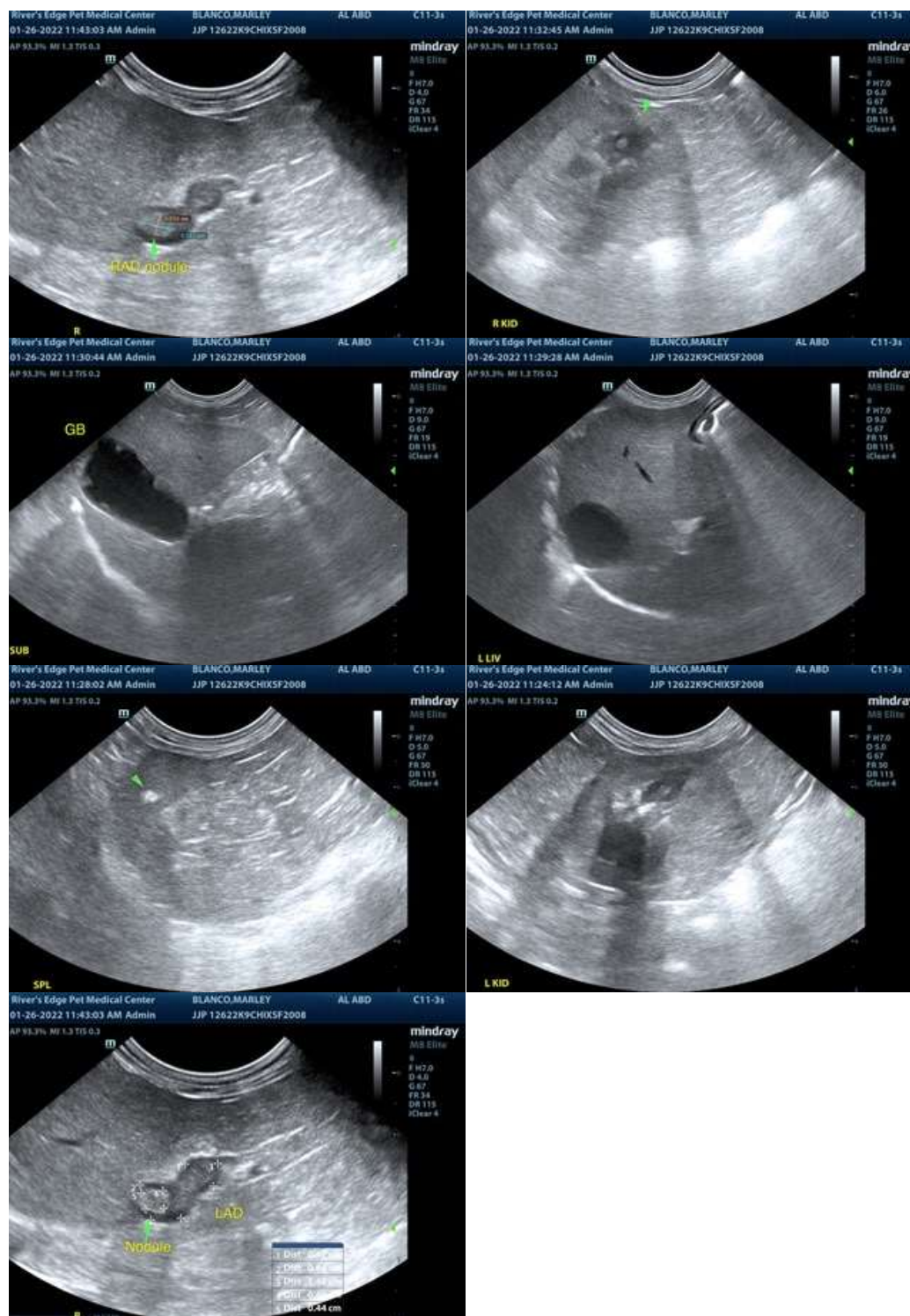
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monitoring of the left and right adrenal nodules for evidence of progression with initial recheck in 4-6 weeks is recommended.



The information and recommendations provided are based on the images presented by the



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referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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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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