



PATIENT	PRESENTING CLINICAL SIGNS
Molly Vandenburg	Doing well at home, found on routine annual bloodwork which was normal last year that ALKP was quite elevated and then rechecked two months later and it had increased again 50%. Has been on Hepatosupport since May 2022 and takes Ubavet Sport supplement, Interceptor and Bravecto.
SPECIES	Abnormal PE/Chem/CBC/UA Results: Elevated ALKP over several months. [ALKP = 752 iu/L (5-160iu/L) on July 5th, 2022).
Canine	
BREED	ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN
Cairn Terrier X	Urinary System
SEX	The urinary bladder, trigone, and cystourethral junction 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.
FS	
AGE	The area of the aortic trifurcation was free of pathology.
11 years	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. Pinpoint to mild focal areas of medullary mineral were noted in both kidneys. No evidence of pelvic dilation was present. The left kidney measured 4.2 cm in length. The right kidney measured 4.7 cm in length.
WEIGHT	
8.8 kg	
INTERPRETED BY	Adrenal Glands
R. McKenzie Daniel, DVM, DABVP	The bilateral adrenal glands were normal in size. Mild parenchyma heterogeneity and mild capsule asymmetry was present without suspicion for overt neoplasia. The left adrenal gland measured 0.59 cm width in the cranial pole and 0.58 cm width in the caudal pole. The right adrenal gland measured 0.66 cm width in the caudal pole. No evidence of adrenal neoplastic criteria or tumors was noted.
IMAGING PERFORMED BY	Spleen
Crystal Hill	The spleen exhibited a finely textured and homogenous parenchyma which was hyperechoic to the liver and renal cortical 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, neoplastic, or benign parenchyma changes were not noted.
HOSPITAL NAME	Liver/ Gallbladder
Stoney Ridge AH	The liver presented mildly 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. A solitary nondisruptive uniform mildly hypoechoic intraparenchymal nodule was present in the midventral liver measuring approximately 3.0 cm in diameter. The nodule did not distort the hepatic capsule. 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, echogenic, nonmineralized biliary sludge. The cystic duct and common bile ducts were normal without evidence of dilation.
REFERRING VET	
Dr. Brooks	
INVOICE	
14326	
DATE	
7/20/22	



PATIENT

Gastrointestinal

Molly Vandenburg

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.

SPECIES

Canine

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.

BREED

Cairn Terrier X

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.

SEX

FS

Free Abdomen

No overt lymphadenopathy or peritoneal effusion was present.

AGE

11 years

ULTRASONOGRAPHIC FINDINGS

- Age-related kidneys with pinpoint to minor medullary mineral
- Hepatopathy with solitary nondisruptive uniform hypoechoic intraparenchymal nodule
- Mild gallbladder debris (non-mucocele)

WEIGHT

8.8 kg

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

INTERPRETED BY

R. McKenzie Daniel,
DVM, DABVP

Overall, the appearance of the liver, as well as the solitary intraparenchymal nodule, were nonspecific with primary consideration for vacuolar hepatopathy and nonclinical cholestasis, given the ALP elevation. The nodule may indicate a focal area of nodular to regenerative hyperplasia, hematopoiesis, and small granuloma, with neoplastic criteria considered less likely yet, cannot be definitively excluded.

IMAGING PERFORMED BY

Crystal Hill

Further assessment may include, assuming normal clotting status and using a 25-gauge needle, ultrasound-guided hepatic parenchymal and nodule FNA for screening cytology. Hepatosupportive medications including Denamarin and Ursodiol with monitoring of ALP elevation, as well as sonographic monitoring of the liver nodule would be a more conservative approach.

HOSPITAL NAME

Stoney Ridge AH

REFERRING VET

Dr. Brooks

Adrenal hyperfunction is considered an unlikely differential diagnosis, given adrenal gland presentation and lack of reported clinical signs, i.e., PU/PD, polyphagia, etc. Adrenal testing could be considered if these clinical signs are noted going forward.

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SPECIES

Canine

BREED

Cairn Terrier X

SEX

FS

AGE

11 years

WEIGHT

8.8 kg

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**IMAGING
PERFORMED BY**

Crystal Hill

HOSPITAL NAME

Stoney Ridge AH

REFERRING VET

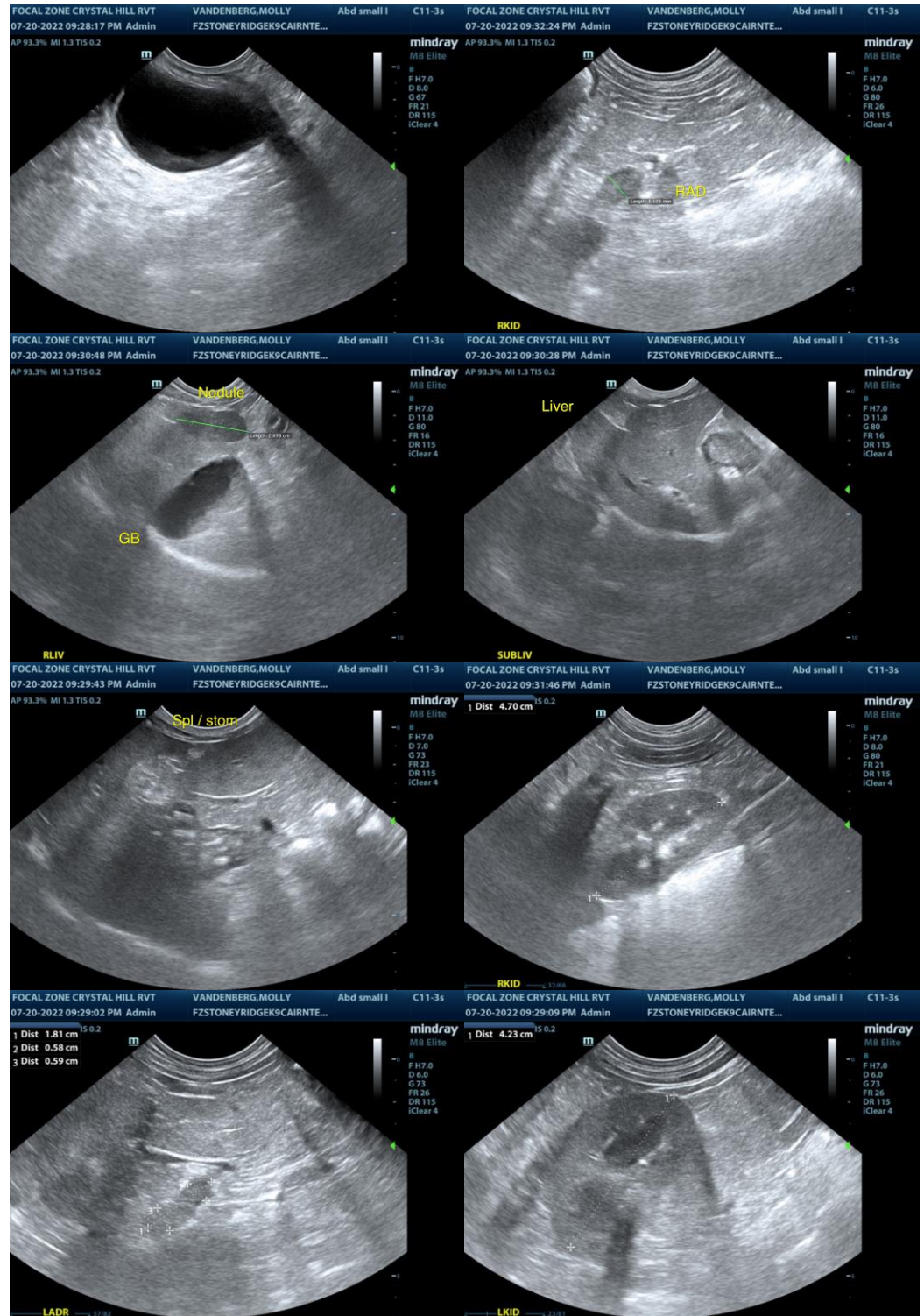
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PATIENT

Molly Vandenburg

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.

BREED

Cairn Terrier X

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

SEX

FS

AGE

11 years

WEIGHT

8.8 kg

INTERPRETED BY

R. McKenzie Daniel,
DVM, DABVP

IMAGING PERFORMED BY

Crystal Hill

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