



PATIENT PRESENTING CLINICAL SIGNS

Maddy Zaruby No csvd. No pupd. App beh wnl. Hx liver enzyme elevations and increased since visit in May 2021. Completed course of denamarin a month ago.

SPECIES Abnormal PE/Chem/CBC/UA Results: ALT (SGPT) 283 Alkaline Phosphatase 1207 IU/L H 5 - 131 GGT 17 IU/L Cholesterol 471 mg/dL H 92 - 324 Triglyceride 288 mg/dL 29 - 291 Amylase 768 IU/L 290 - 1125 PrecisionPSL 145 U/L Ca 11.9 Specific Gravity 1.013 PH 7.5 PROTEIN 3+
Canine

BREED Urinary System

Golden Ret 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.

SEX

Spayed Female The area of the aortic trifurcation was free of pathology.

AGE

10 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. No evidence of pelvic dilation was present. The left kidney measured 6.6 cm in length. The right kidney measured 6.8 cm in length.

WEIGHT

60 lbs.

Adrenal Glands

The left adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 0.58 cm width at the caudal pole and 0.53 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 0.64 cm width at the caudal pole and 1.0 cm width at the cranial pole. No evidence of adrenal hyperplasia or masses was evident.

INTERPRETED BY

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

IMAGING PERFORMED BY

Spleen

The spleen exhibited primarily finely textured parenchyma which was hyperechoic to the liver and renal cortical parenchyma. Mild generalized parenchyma heterogeneity was present without evidence of nodular changes. 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. The parenchymal heterogeneity is likely consistent with benign changes such as extramedullary hematopoiesis or age-related remodeling with minor potential for inflammatory or neoplastic disease.

Liver/ Gallbladder

The liver exhibited generalized enlargement primarily in the right lateral to caudate liver secondary to a mildly expansive, nonhomogeneous, focally nodular mass. The mass measured approximately 8.5 cm x 7.5 cm. Intermittent, subtle, non-expansive, hypoechoic parenchymal nodules were noted in the mid to left liver not associated with the mass. An example of a liver nodule measured 1.9 cm in diameter. 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. The gallbladder was non

HOSPITAL NAME

Donner Truckee VH

REFERRING VET

Dr. India Vannini

INVOICE

12208

DATE

9/11/21



PATIENT

Maddy Zaruby

distended in size with mild, echogenic, nonmineralized biliary sludge. The cystic duct and common bile ducts were normal without evidence of dilation.

Gastrointestinal

SPECIES

Canine

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.

BREED

Golden Ret

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

Pancreas

SEX

Spayed Female

The pancreas was normal in size and contour with isoechoic to heterogeneous parenchyma compared to adjacent omentum. No signs of active inflammation or neoplasia. This is likely consistent with age-related pancreatic changes and considered incidental.

AGE

10 years

Free Abdomen

Intermittent, mesenteric lymph nodes were present. The lymph nodes were essentially isoechoic to adjacent omentum without evidence of peripheral inflammation and maintaining a normal width: length ratio (<0.5). An example of the lymph nodes measured 2.5 cm x 0.56 cm.

WEIGHT

60 lbs.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- Nonhomogeneous to focally nodular right lateral to caudate liver mass
- Intermittent concurrent mid to left subtly hypoechoic hepatic parenchymal nodules
- Mild gallbladder debris (non-mucocele)

Secondary Findings

- Mild chronic renal changes

INTERPRETED BY

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

IMAGING PERFORMED BY

Loetitia Saint-Jacques, RVT

HOSPITAL NAME

Donner Truckee VH

REFERRING VET

Dr. India Vannini

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Considerations for the liver mass may include hyperplasia, granuloma, hematopoiesis, or neoplasia such as adenocarcinoma or other. Although sampling is required for further clarification, neoplasia is favored, although not definitive.

Assuming normal clotting status, ultrasound-guided FNA of the liver mass is warranted for screening cytology. However, core biopsy may be required for a definitive diagnosis. Surgical resectability of the hepatic mass is considered questionable given its location potentially adjacent to the porta hepatis.

INVOICE

12208

DATE

9/11/21

Empirically, continued hepatosupportive medications including Denamarin and Ursodiol, given the presence of mild gallbladder debris, are recommended. Three-view chest radiographs are suggested.



PATIENT

Maddy Zaruby

SPECIES

Canine

BREED

Golden Ret

SEX

Spayed Female

AGE

10 years

WEIGHT

60 lbs.

INTERPRETED BY

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

IMAGING PERFORMED BY

Loetitia Saint-Jacques, RVT

HOSPITAL NAME

Donner Truckee VH

REFERRING VET

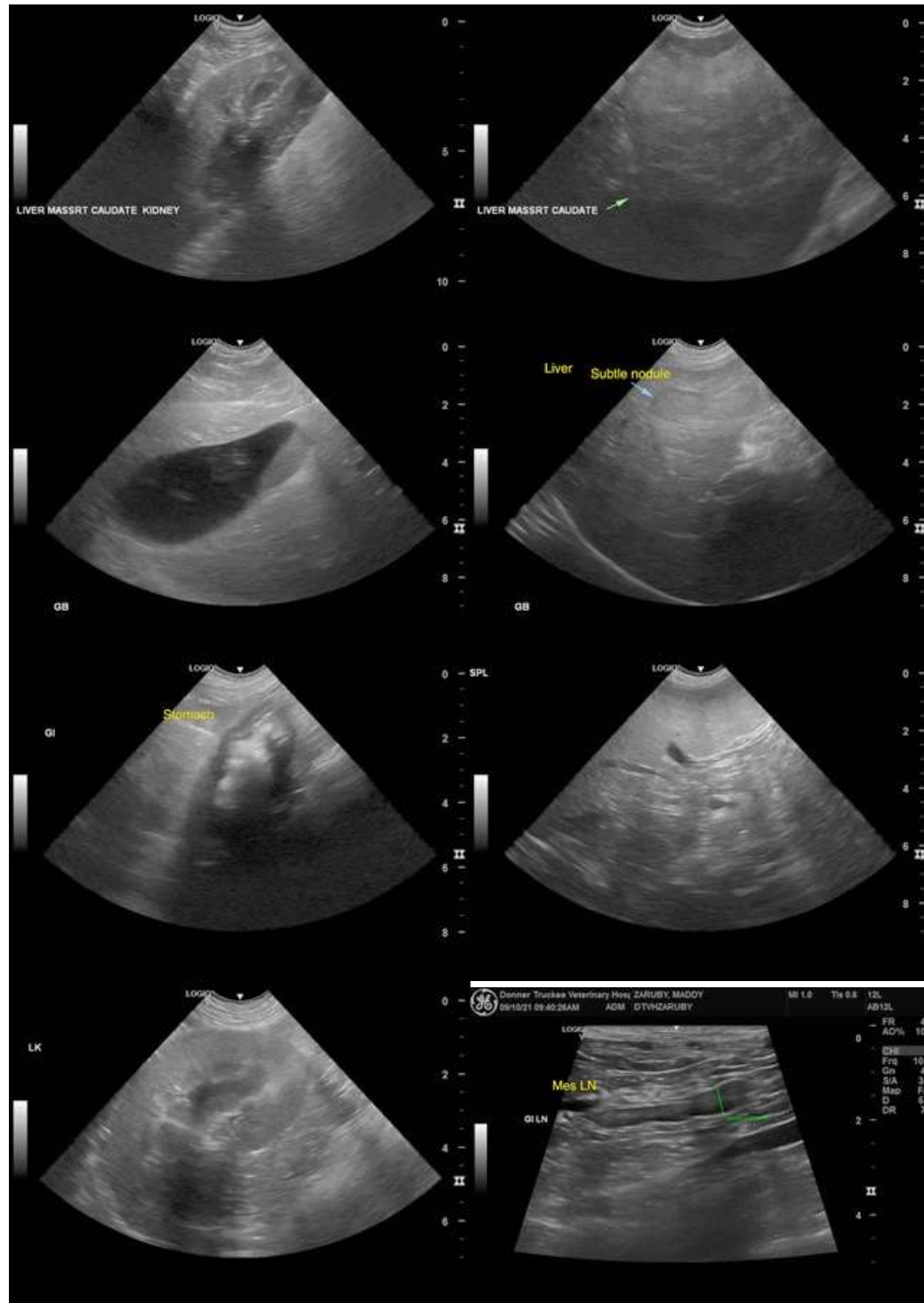
Dr. India Vannini

INVOICE

12208

DATE

9/11/21



Donner Truckee Veterinary Hosp ZARUBY, MADDY
09/10/21 09:40:28AM ADM DTVHZARUBY

Mt	1.0	Tlx	0.8	12L
AB12L				
FR				44
AO%				100
DSE				
Freq				10.5
Gr				47
SA				3.8
Map				7.6
D				5.0
DR				72



PATIENT

Maddy Zaruby

SPECIES

Canine

BREED

Golden Ret

SEX

Spayed Female

AGE

10 years

WEIGHT

60 lbs.

INTERPRETED BY

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

IMAGING PERFORMED BY

Loetitia Saint-Jacques, RVT

HOSPITAL NAME

Donner Truckee VH

REFERRING VET

Dr. India Vannini

INVOICE

12208

DATE

9/11/21



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