

Portable Animal Wellness Sonography, Inc.

IMAGING PERFORMED BY

pawsonography@gmail.com 530-786-8340

PATIENT PRESENTING CLINICAL SIGNS

PATIENT Dustin Stone
SPECIES Canine
BREED Mini Schnauzer
SEX Neutered Male

Dustin presented for 6 months recheck lab work on 12/1/2022. O noted that he has been doing great, no v/d, no recurrence of pain episodes - O is being very careful though, trained not to jump on bed anymore. Dustin has history of recurrent GI signs - we switched him to Royal Canin HP last summer and he has been doing very well (diarrhea resolved). He has also had an episode of back pain - since resolved and he is doing well. He has chronic grade II/VI heart murmur; last radiographs taken 07/2021 showed mild heart enlargement otherwise NSF and heart medications not noted to be necessary. On most recent check, his ALP was again elevated and increased from previous lab work (1442). Recommend abdominal ultrasound given persistent fluctuating elevation. His triglycerides were very elevated at 2221 (new for P) - he was not fasted so we will be rechecking today 12/13/22 fasted. His lab work otherwise showed normal rbc, wbc, glucose, kidney values, electrolytes (with exception of mildly low chloride), proteins, gallbladder enzyme, pancreatic enzyme, and thyroid value. HWT Negative. USG 1.024. Physical Exam Findings/Reason for Ultrasound: Persistent ALP elevation, new triglyceride elevation

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

AGE 10 Years
WEIGHT 14.7 Pounds

Urinary System
 The urinary bladder is moderately distended with anechoic contents. No masses, inflammatory changes, echogenic sediment or cystoliths are observed. The urinary bladder, trigone and visible pelvic urethra are normal in thickness with a smooth mucosal surface.

Prostate is normal in size, echotexture and echogenicity for a neutered male.

INTERPRETED BY Beth Johnson, DVM DACVIM

The right kidney is normal in size (4.8 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed.

IMAGING BY Loetitia Saint-Jacques, LVT

The left kidney is normal in size (4.4 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed.

HOSPITAL NAME Advanced PC of Nevada

Adrenal Glands
 The right adrenal gland is normal in size (0.38 cm at the cranial pole and 0.30 cm at the caudal pole), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

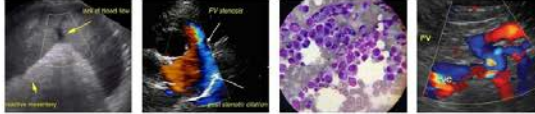
The left adrenal gland is normal in size (0.47 cm at the cranial pole and 0.48 cm at the caudal pole), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

REFERRING VET Dr. Hazelwood

Spleen
 The spleen is subjectively normal in size with a normal smooth capsular contour. Parenchyma is appropriately finely textured and homogenous with normal echogenicity relative to surrounding tissue (hyperechoic to liver). No focal nodules or masses are observed. Splenic vasculature appears normal.

INVOICE 43446

DATE 12/13/22



PATIENT *Liver*

Dustin Stone

Liver is subjectively enlarged with mildly irregular margins. Parenchyma is heterogenous characterized by multiple poorly defined hypoechoic nodules within otherwise hyperechoic liver parenchyma. The most prominent discrete hypoechoic nodule is approximately 1.0 cm in size and deep in the liver. Visible vasculature and biliary tree appear normal without distension or congestion.

SPECIES

Canine

Gallbladder is moderately distended with anechoic bile as well as suspended and gravity dependent echogenic debris (mild). The wall is smooth without visible thickening. There is no evidence of cystic or CBD dilation. There is no evidence of effusion or inflammation.

BREED

Mini Schnauzer

Gastrointestinal

The stomach wall is normal in thickness (canine < 0.5 cm and feline < 0.4 cm) and layering. The lumen of the stomach is empty with no evidence of obstruction, foreign material or infiltrative disease. Pyloric outflow tract appears patent.

SEX

Neutered Male

AGE

10 Years

The visible small intestines are normal in wall thickness and layering (canine duodenum < 0.5 cm and feline duodenum < 0.4 cm; other < 0.3 cm). Small intestinal motility appears adequate (1-3 contractions per min). The lumen of the small intestine is empty with no evidence of obstruction, foreign material or infiltrative disease.

WEIGHT

14.7 Pounds

The visible colon is normal in wall thickness (< 0.2 cm) and layering. Contents are consistent with normal formed feces and gas.

INTERPRETED BY

Beth Johnson, DVM
DACVIM

Pancreas

The pancreatic parenchyma is appropriately isoechoic to surrounding tissue. Visible capsule is smooth and normal in contour. There is no visible pancreatic duct dilation. There is no evidence of active peripancreatic inflammation.

Free Abdomen

There is no evidence of free peritoneal effusion noted in these images.

IMAGING BY

Loetitia Saint-Jacques,
LVT

There is a prominent, hypoechoic, rounded 0.8-0.9 cm sublumbar lymph node present.

PRIMARY FINDINGS

HOSPITAL NAME

Advanced PC of Nevada

- **Heterogenous Liver** – These changes are most consistent with benign processes such as nodular hyperplasia, steroid (vacuolar) hepatopathy, extramedullary hematopoiesis or possibly chronic inflammatory disease and less commonly infiltrative round cell or metastatic neoplasia.

REFERRING VET

Dr. Hazelwood

SECONDARY FINDINGS

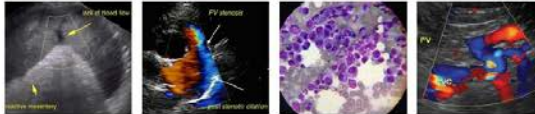
INVOICE

43446

- **Mild gallbladder debris** - Cholecystic debris is of unknown clinical significance. It can be seen with biliary stasis from fasting or illness. Cholecystic debris is not necessarily related to hepatobiliary disease. Echogenic bile is most commonly an incidental finding in dogs and should be interpreted in combination with clinical signs such as nausea, inappetence, cranial

DATE

12/13/22



PATIENT

abdominal discomfort and/or laboratory changes such as increased ALP and/or increased Tbili.

Dustin Stone

- **Mild sublumbar lymphadenopathy** – most consistent with a reactive lymph node. Infiltrative neoplasia can't be ruled out but is considered less likely.

SPECIES

Canine

BREED

Mini Schnauzer

SEX

Neutered Male

AGE

10 Years

WEIGHT

14.7 Pounds

INTERPRETED BY

Beth Johnson, DVM
DACVIM

IMAGING BY

Loetitia Saint-Jacques,
LVT

HOSPITAL NAME

Advanced PC of Nevada

REFERRING VET

Dr. Hazelwood

INVOICE

43446

DATE

12/13/22

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Differentials for increased ALP are vast and non-specific. Differentials include, but are not limited to, benign nodular hyperplasia which occurs in 70% of older dogs and often does not result in an abnormal ultrasound, reactive or idiopathic/vacuolar hepatopathy, cholestasis and/or hyperadrenocorticism as well as many chronic non-hepatobiliary diseases such as chronic infections/inflammation from dental disease, IBD, neoplasia, hyperlipidemia, hypothyroidism, chronic pancreatitis, chronic stress, etc.

There is no ultrasonographic evidence of cholestasis. Adrenocortical testing such as a low dose dexamethasone suppression test could be considered if clinical signs of hyperadrenocorticism are present. Ursodiol could be considered if gallbladder sludge is noted. A fine needle aspirate of the liver could be considered if patient's coagulation status is appropriate. Otherwise, recommendations include addressing any other concurrent disease and monitoring. If values are progressive, recheck imaging is recommended.

Schnauzers are predisposed to idiopathic hypertriglyceridemia, which can lead to a secondary cholestatic hepatopathy, so given this patient's hypertriglyceridemia, a recheck fasted level is recommended, and if still increased, treatment should be considered, beginning potentially with a low-fat diet, although given patient's reported diet restriction based on gastrointestinal disease, consultation with a nutritionist may be necessary to help find the best lowest fat hydrolyzed protein diet or potentially a homecooked diet could be an option.

Given the mild sublumbar lymphadenopathy, if not already evaluated, a thorough rectal/perianal examine is recommended to assess anal glands, etc.

If not recently evaluated, urinalysis and, if indicated based on urinalysis results, urine culture are recommended. If protein is present in an otherwise quiet sediment, protein quantification with a urine protein to creatinine ration is recommended.



Portable Animal Wellness Sonography, Inc.

IMAGING PERFORMED BY

pawsonography@gmail.com 530-786-8340

PATIENT

Dustin Stone

SPECIES

Canine

BREED

Mini Schnauzer

SEX

Neutered Male

AGE

10 Years

WEIGHT

14.7 Pounds

INTERPRETED BY

Beth Johnson, DVM
DACVIM

IMAGING BY

Loetitia Saint-Jacques,
LVT

HOSPITAL NAME

Advanced PC of Nevada

REFERRING VET

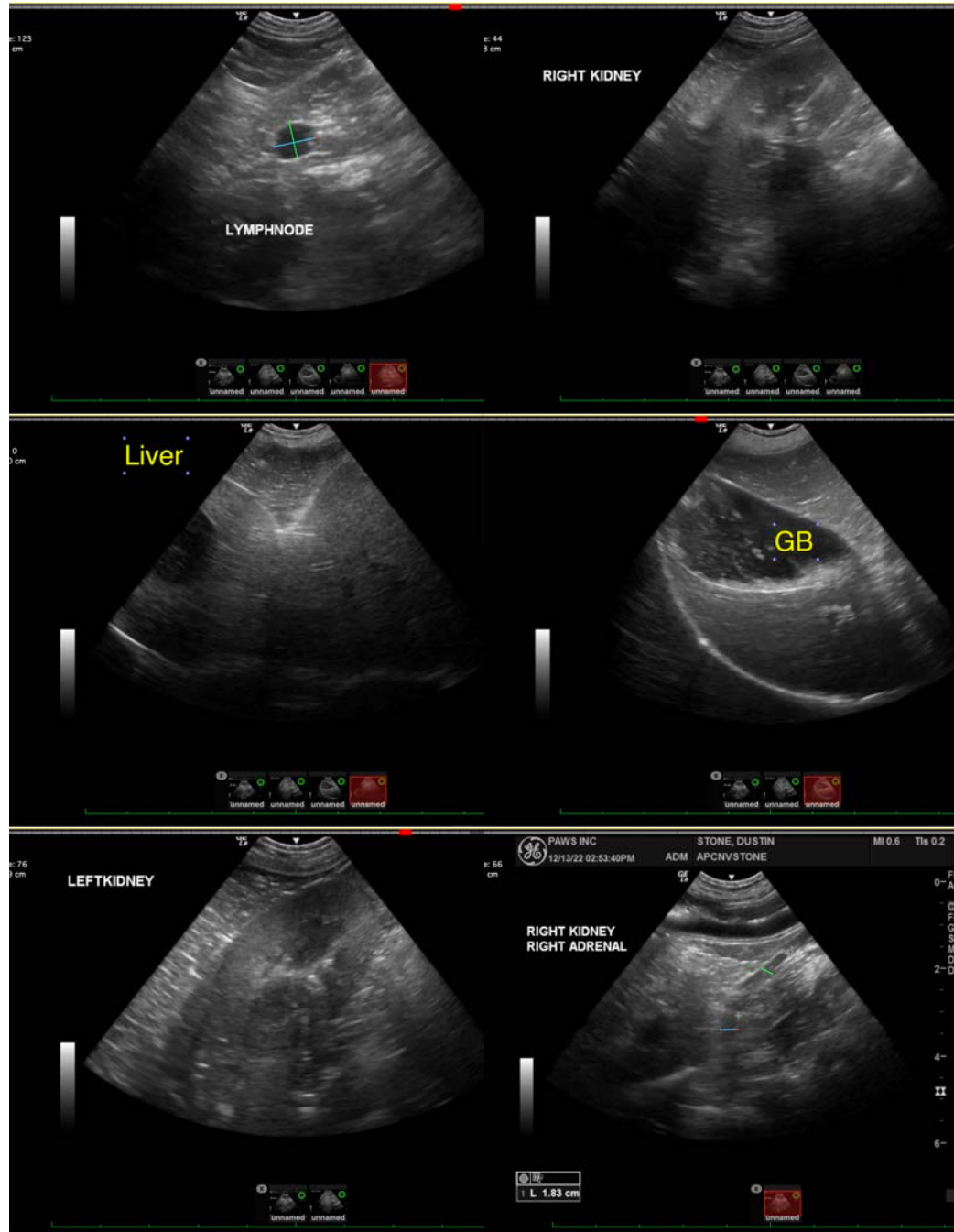
Dr. Hazelwood

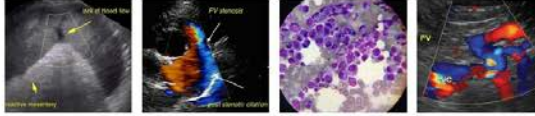
INVOICE

43446

DATE

12/13/22





Portable Animal Wellness Sonography, Inc.

IMAGING PERFORMED BY

pawsonography@gmail.com 530-786-8340

PATIENT

Dustin Stone

SPECIES

Canine

BREED

Mini Schnauzer

SEX

Neutered Male

AGE

10 Years

WEIGHT

14.7 Pounds

INTERPRETED BY

Beth Johnson, DVM
DACVIM

IMAGING BY

Loetitia Saint-Jacques,
LVT

HOSPITAL NAME

Advanced PC of Nevada

REFERRING VET

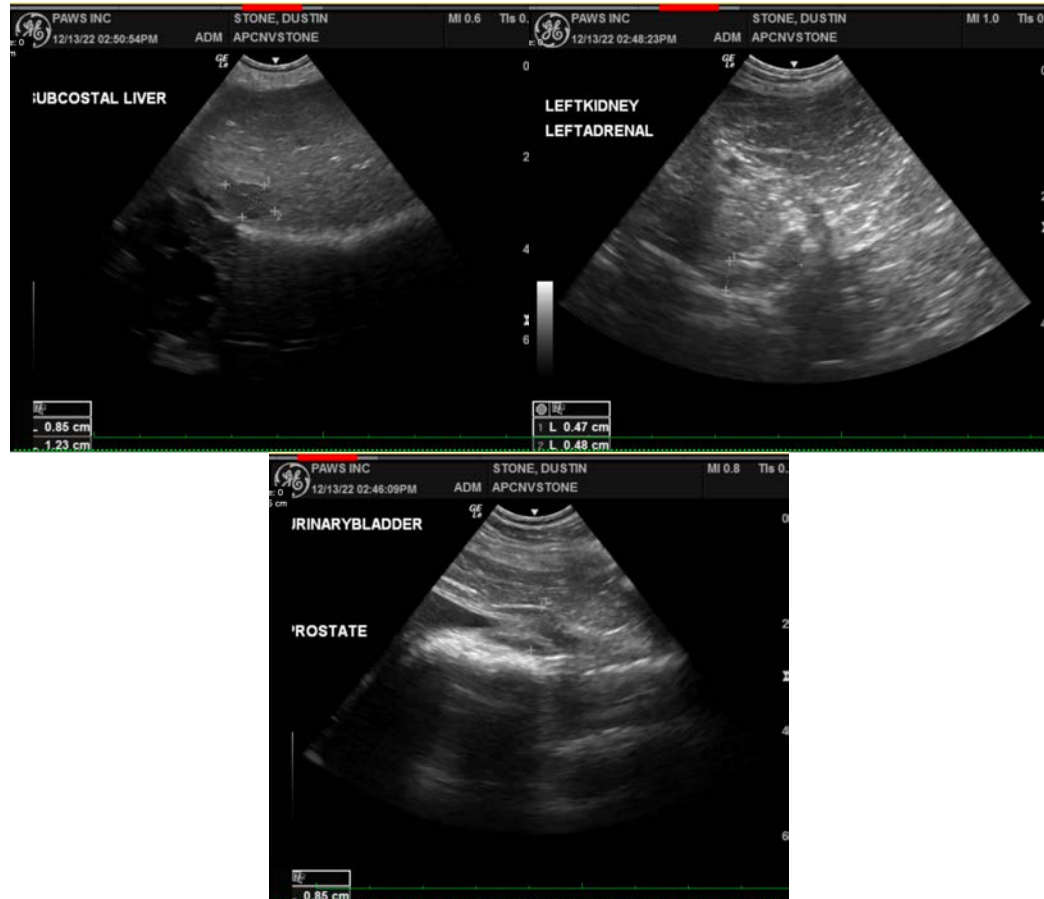
Dr. Hazelwood

INVOICE

43446

DATE

12/13/22



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.

Beth Johnson, DVM, DACVIM
Beth.Johnson@sonopath.com