



**PATIENT PRESENTING CLINICAL SIGNS**

Sparky Groesbeck Elevated liver values. Medication: Denamarin

Abnormal PE/Chem/CBC/UA Results: ALP 496, ALT 146

**SPECIES ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

Canine

**Urinary System**

**BREED**

Jack Russell Mix

The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of 3 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 were noted.

**SEX**

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. A thinly walled cyst measuring 0.9 cm in diameter was present in the left kidney. A small right kidney lateral cortical cyst was present. The left kidney measured 4.6 cm in length. The right kidney measured 5.2 cm in length

MN

**AGE**

2010

The area of the aortic trifurcation was free of pathology.

**WEIGHT**

25.3

The area of the residual prostate appeared normal and free of pathology.

**Adrenal Glands**

The left adrenal gland was mildly enlarged in size and contour with a subtle heterogeneous nonmineralized parenchyma. The left adrenal gland measured 0.73 cm width at the caudal pole and 1.1 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 0.36 cm width at the caudal pole and 2.0 cm length.

**INTERPRETED BY**

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

**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.

**IMAGING PERFORMED BY**

Rebekah Jakum, CVT  
 ARDMS/RVT

**Liver**

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 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 echogenic, nonmineralized, nondependent biliary sludge. The biliary sludge was non organized with a hypoechoic to anechoic, irregular to interrupted rim visible between the nondependent sludge and inner wall. No signs of peripheral inflammation.

**HOSPITAL NAME**

Community VP

**REFERRING VET**

Dr. Carpenter

**INVOICE**

12338ag

**DATE**

12/01/2022



**PATIENT** *Gastrointestinal*

Sparky Groesbeck 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** 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.

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

**BREED** *Pancreas*

Jack Russell Mix The parenchyma of the pancreas was hyperechoic to adjacent omental fat with diffuse parenchyma remodeling. The capsule of the pancreas was mildly asymmetrical in contour without evidence of peripancreatic inflammation. These changes may suggest chronic inflammation, fibrosis, or saponification if there is a previous history of pancreatitis. No overt signs of pancreatic neoplasia.

**SEX**

MN *Free Abdomen*

No overt lymphadenopathy or peritoneal effusion was present.

**AGE** **ULTRASONOGRAPHIC FINDINGS**

2010

- Age related kidneys with cortical cysts
- Enlarged left adrenal gland
- Benign hepatopathy-vacuolar hepatopathy, inflammatory/immune mediated disease, hematopoiesis, hyperplasia, fibrosis or other hepatopathy possible. Neoplastic criteria considered unlikely
- Immature gallbladder mucocele
- Chronic pancreatitis/fibrosis pattern pancreas base and proximal right limb

**WEIGHT**

25.3

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

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

Without reported clinical signs like PU/PD, polyphagia, etc., the enlarged left adrenal gland is of unclear clinical significance. A full adrenal workup with LDDST and assessment of systemic BP for evidence of hypertension may be considered.

**IMAGING PERFORMED BY**  
Rebekah Jakum, CVT  
ARDMS/RVT

Assuming normal clotting status, a hepatic FNA for screening cytology is warranted for further assessment. Ursodiol therapy is recommended in addition to Denamarin with monitoring for evidence of cranial abdominal discomfort and increasing cholestasis associated with the gallbladder.

**HOSPITAL NAME**

Community VP A spec cPL may be considered if clinical signs consistent with chronic pancreatitis are present. Sonographic monitoring of the left adrenal gland and the gallbladder is recommended.

**REFERRING VET**

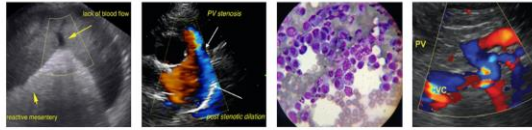
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**PATIENT**

Sparky Groesbeck

**SPECIES**

Canine

**BREED**

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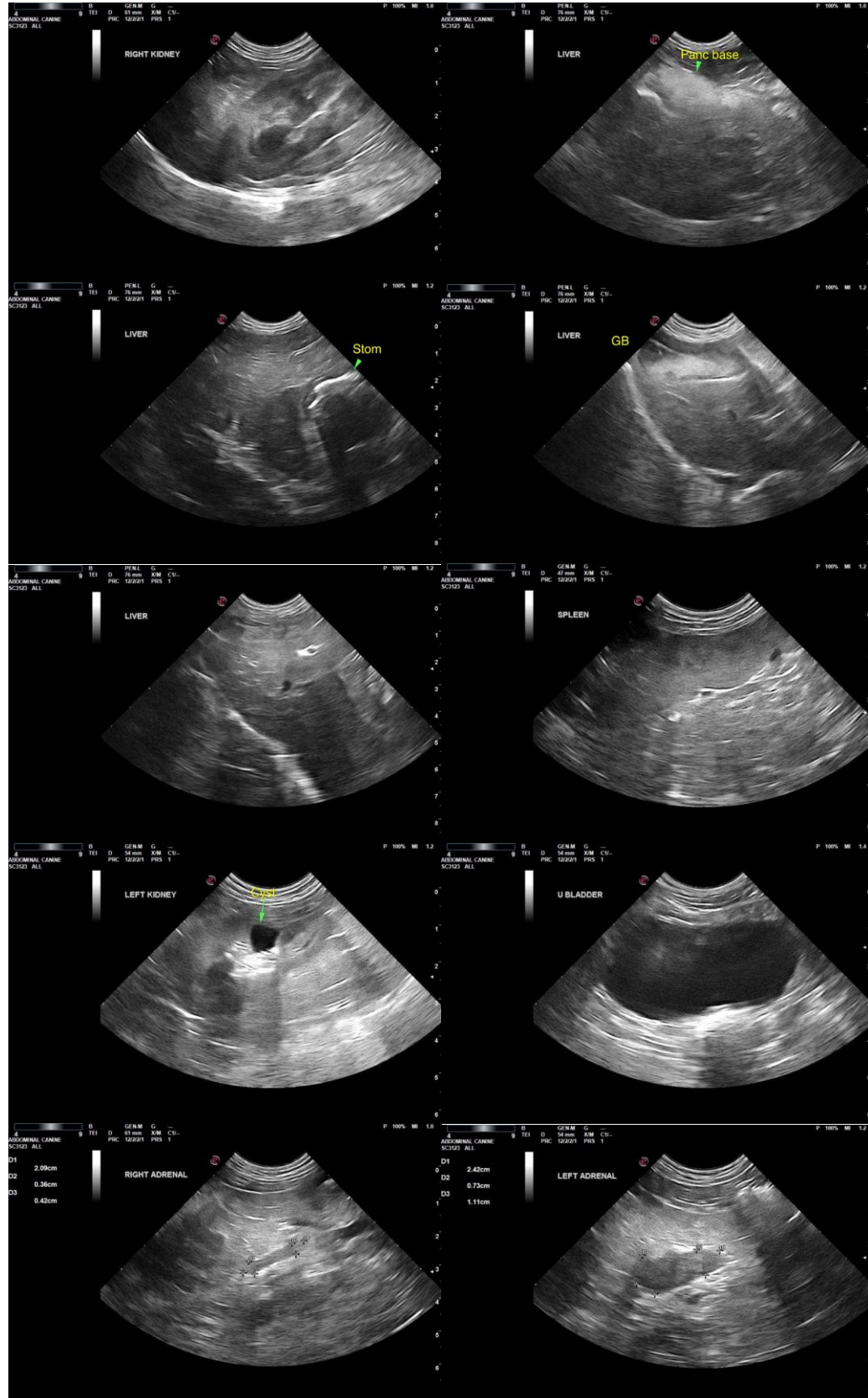
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**PATIENT**

Sparky Groesbeck

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**

Jack Russell Mix

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