



**PATIENT PRESENTING CLINICAL SIGNS**

Koby Engel Bloated, ascites - white fluid.  
 Medication: Lasix, Pred, Amlodipine, Theophylline

**SPECIES** Abnormal PE/Chem/CBC/UA Results:  
 Canine

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**BREED** *Urinary System*

Yorkshire Terrier The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra 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**

M

**AGE**

2008

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 moderate loss of corticomedullary symmetry and definition expected for the age of the patient. Mild bilateral pyelectasia was present. The left kidney measured 4.5 cm in length. The right kidney measured 5.1 cm in length.

The area of the aortic trifurcation was free of pathology.

**WEIGHT**

14

The area of the iliac trifurcation was free of pathology including no overt evidence of medial, iliac or sublumbar lymphadenopathy.

**INTERPRETED BY**

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

The prostate was enlarged in size with intact, symmetrical capsule contour. The margins of the gland were intact and able to be differentiated from the surrounding tissue. The prostatic parenchyma was mildly echogenic to heteroechoic without parenchymal mineralization. A thinly walled intraparenchymal cyst containing anechoic fluid was present. The prostate measured 3.5 cm x 2.7 cm.

The left and right testicles were mildly irregular in size and appearance exhibiting bilateral nodules and right testicular cystic lesion.

**IMAGING PERFORMED BY**

Rebekah Jakum, CVT  
 ARDMS/RVT

*Adrenal Glands*

The bilateral adrenal glands were mildly prominent in size. Mild parenchyma heterogeneity and mild capsule asymmetry was present without suspicion for overt neoplasia. The left adrenal gland measured 1.7 cm length and 0.67 cm width in the caudal pole. The right adrenal gland measured 2.2 cm length and 0.82 cm width in the caudal pole.

**HOSPITAL NAME**

Community VP

*Spleen*

**REFERRING VET**

Carpenter

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.

**INVOICE**

12951ag

*Liver/Gallbladder*

The liver exhibited generalized enlargement, areas of capsule asymmetry and moderate non-homogenous mixed echogenic to nodular hepatic parenchyma. The hepatic and portal vasculature were normal in appearance without signs of congestion. The gallbladder was non-distended in size.

**DATE**

02/13/2023



**PATIENT**

Koby Engel

The gallbladder wall was thickened in appearance consisting of an echogenic double rim corresponding to the inner and outer portions of the wall. This is consistent with moderate gallbladder wall edema. Possible causes may include acute inflammation, edema and anaphylaxis. Non-dependent non-organized hyperechoic gallbladder debris was present. The cystic and common bile ducts were normal.

**SPECIES**

Canine

**Gastrointestinal**

The stomach presented wall thickening secondary to echogenic mucosa hypertrophy. Intact wall layering was maintained and distinct. Mild gastric distension with primarily anechoic fluid was present.

**BREED**

Yorkshire Terrier

The small intestine presented intact wall layering with 1:3 muscularis/mucosa ratio. Minor segmental jejunal mucosal speckling was present. The lumen of the small intestine was empty with no signs of ileus, obstruction or foreign material.

**SEX**

M

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

**Pancreas**

**AGE**

2008

The pancreas was normal in size and contour with isoechoic to heterogeneous parenchyma compared to adjacent omentum and discrete hypoechoic striations. No signs of active inflammation or neoplasia.

**Free Abdomen**

No visualized overt lymphadenopathy was present.

**WEIGHT**

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Generalized mild non-uniform hyperechoic omentum with mild volume peritoneal free fluid was present.

**ULTRASONOGRAPHIC FINDINGS**

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DVM, DABVP  
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- Mild volume peritoneal effusion with generalized hyperechoic omentum
- Enlarged heterogenous non-uniform nodular liver-vacuolar hepatopathy, inflammatory/immune mediated disease, hematopoiesis, hyperplasia, fibrosis, cholestasis or infiltrative neoplasia all potentials
- Moderate gallbladder wall edema with concurrent non-organized debris-acute cholecystitis, edema secondary to hepatic pathology/portal hypertension, hypoalbuminemia, neoplasia or other

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ARDMS/RVT

**HOSPITAL NAME**

Community VP

**REFERRING VET**

Carpenter

- Heterogenous to edematous pancreas
- Subjective mild gastroenteritis pattern
- Bilateral prominent adrenal glands-no overt adrenal tumors

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**Secondary**

- Moderate chronic renal changes with mild bilateral pyelectasia

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**PATIENT**

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- Benign prostatic hyperplasia with intraparenchymal cyst, potential for prostatitis, neoplastic criteria considered unlikely

**SPECIES**

Canine

- Bilateral nodular to cystic testicles

**BREED**

Yorkshire Terrier

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

Effusion analysis cytology and C/S is recommended for further assessment. Assuming normal clotting status a hepatic FNA for screening cytology is warranted for further assessment. Three view chest radiographs are recommended if not done to assess for cardiomegaly or occult thoracic pathology. A full CBC/chemistry panel/UA is suggested for further correlation if not done. A very guarded prognosis indicated pending additional diagnostics.

**SEX**

M

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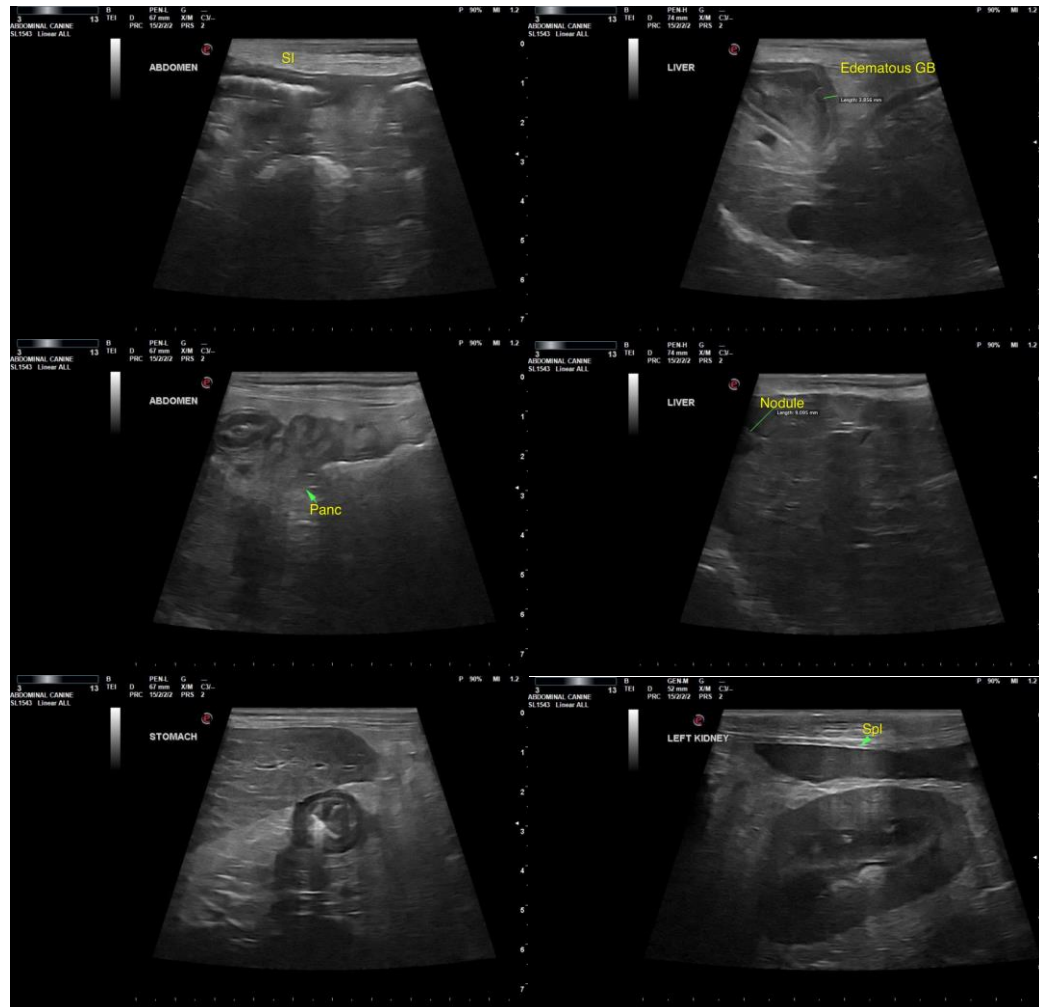
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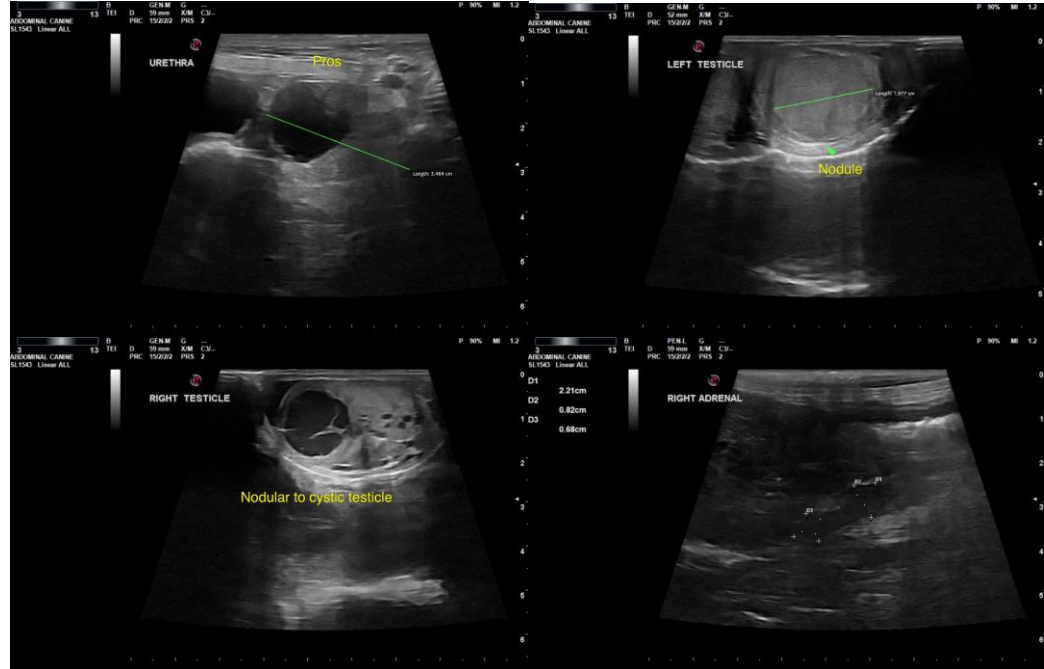
Carpenter

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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.

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