



**PATIENT PRESENTING CLINICAL SIGNS**

Gracie Jones History: Hematuria, pyuria, decreased appetite, lethargy, weight loss. Medication: Cerenia, Rimadyl

**SPECIES ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**Canine Urinary System**

The urinary bladder revealed generalized marked yet variable thickened walls, exhibiting decreased nonhomogenous mural echogenicity. Minimal anechoic urine was present. Luminal potentially adhered versus mural mineralization was present. Associated regional inflammation was noted around the urinary bladder. The proximal urethra was indistinctly visualized to a depth of 3.0 cm.

**BREED**

Australian Cattle Dog  
Mix

Normal size and margination were present in the left kidney. A normal 1:3 cortex / medulla ratio was maintained. The medulla and cortices were uniform in texture with some increased echogenicity and loss of corticomedullary symmetry and definition expected for the age of the patient. No evidence of pelvic dilation was present. The left kidney measured 5.8 cm in length. Pinpoint to focal areas of medullary mineral and small cortical cysts were noted.

**SEX**

Spayed Female

**AGE**

2008

The right kidney exhibited moderate loss of corticomedullary border demarcation, asymmetrical margination and moderate hydronephrosis, exhibited by moderate pelvic urine dilation, extending into the lateral diverticula. Concurrent right hydroureter was noted, extending distally from the right kidney for a visualized estimated 3-4 cm.

**WEIGHT**

36.8

**Adrenal Glands**

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 2.3 cm in length x 0.60 cm width in the caudal pole. The right adrenal gland measured 2.7 cm in length x 0.82 cm width in the caudal pole.

**INTERPRETED BY**

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

**Spleen**

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.

**IMAGING PERFORMED BY**

Rebekah Jakum, CVT  
ARDMS/RVT

**Liver**

The liver was asymmetrically enlarged with associated areas of capsule asymmetry. Generalized nonhomogenous parenchyma was noted, exhibiting mid intraparenchymal moderately expansive nonhomogenous mass along with concurrent intermittent separate mildly expansive variably echogenic intraparenchymal nodules. The mass measured approximately 5-6 cm in diameter.

**HOSPITAL NAME**

Easton AH

**REFERRING VET**

Dr. Nankman

The gallbladder was non-distended in size with mildly prominent to hyperechoic walls. Primarily anechoic content with moderate nondependent mobile hyperechoic debris. The cystic and common bile ducts were normal.

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**Gastrointestinal**

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.

**DATE**

12/13/22



**PATIENT**

Gracie Jones

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.

**SPECIES**

Canine

***Pancreas***

The pancreas exhibited generalized prominent size with minor capsule asymmetry. Mildly nonhomogenous to hypoechoic parenchyma compared to adjacent omentum was noted.

**BREED**

Australian Cattle Dog  
Mix

***Free Abdomen***

No evidence of medial iliac or sublumbar lymphadenopathy or peritoneal effusion was present.

**SEX**

Spayed Female

**ULTRASONOGRAPHIC FINDINGS**

- Marked generalized thickened urinary bladder, exhibiting decreased wall echogenicity and luminal versus mural mineralization
- Right kidney moderate hydronephrosis with concurrent right hydroureter
- Left kidney moderate chronic changes with pinpoint medullary mineral and cortical cysts
- Enlarged nonhomogenous to nodular liver with mid intraparenchymal mass
- Moderate gallbladder debris (non-mucocele)

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**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

**INTERPRETED BY**

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DVM, DABVP  
(Canine and Feline)

Sonographically, the urinary bladder appearance is strongly suggestive of extensive urinary bladder tumor, i.e., transitional cell carcinoma or other. Secondary right ureter obstruction likely owing to urinary bladder pathology and secondary right kidney nephrosis/right hydroureter is likely. Although sampling is required for further assessment, concurrent primary or potential metastatic hepatic neoplastic criteria is suspected.

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Further assessment may include screening BRAF assay, FNA cytology of the liver mass and parenchyma for further assessment and potential for oncology consult may be considered. Three view chest radiographs are recommended. Unfavorable prognosis is likely indicated.

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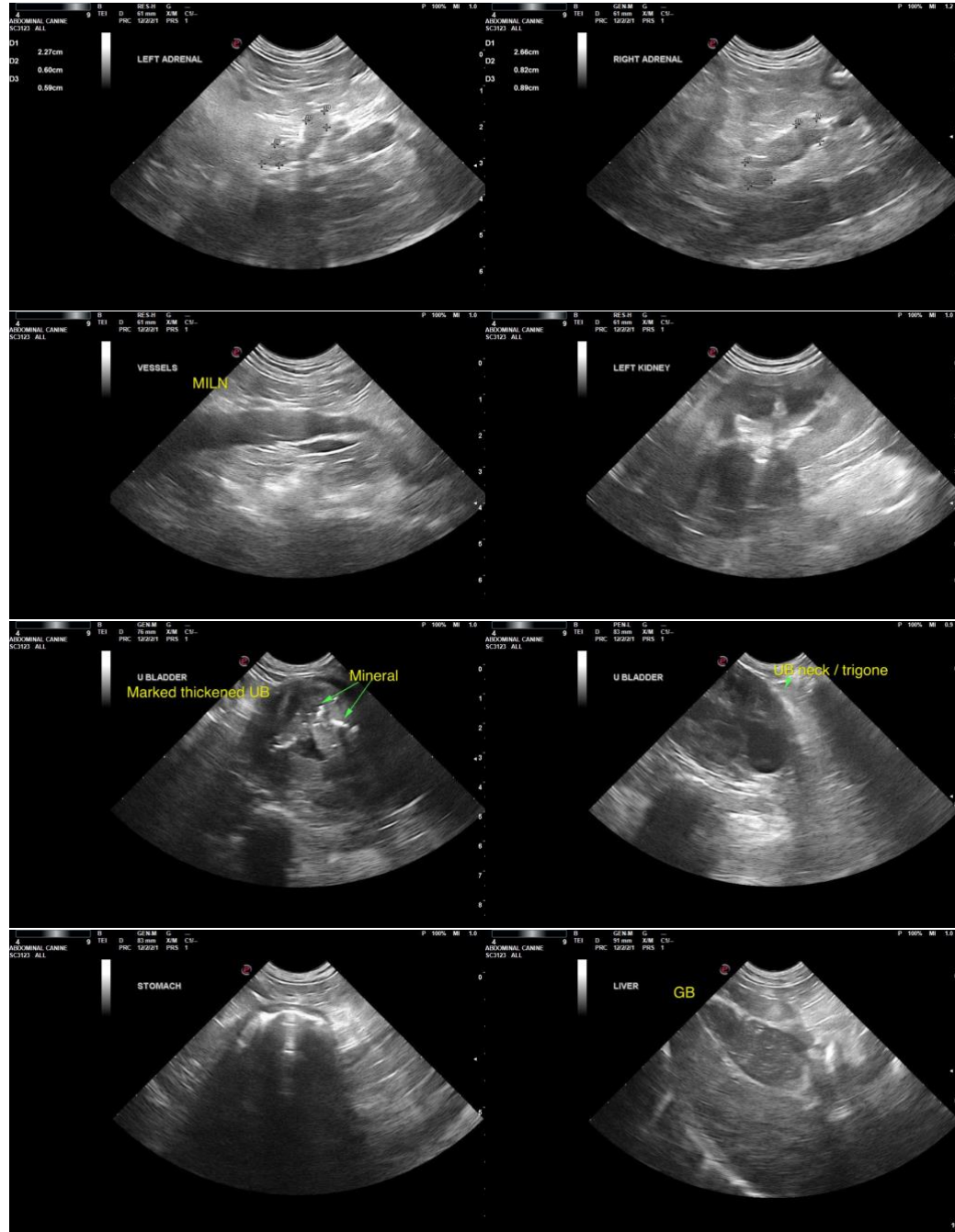
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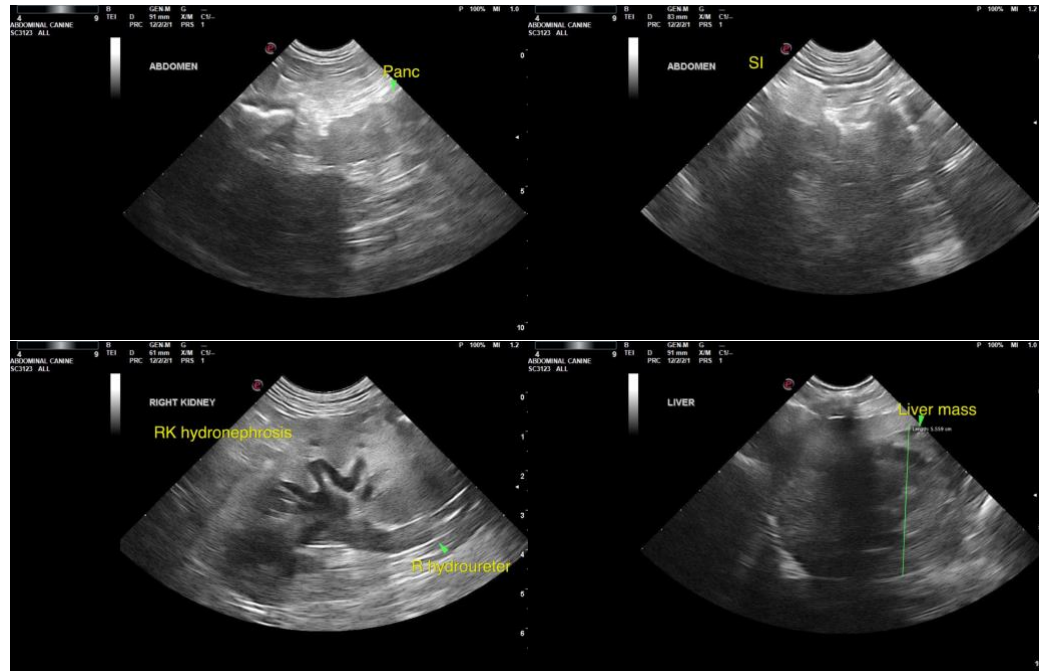
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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)**  
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