

**PATIENT PRESENTING CLINICAL SIGNS**

Lola Giordano Cushing's disease. Intermittent hematuria, PU/PD. ALP 1398; urine culture negative. On Vetoryl 10 mg SID.

**SPECIES ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

Canine **Urinary System**

**BREED**

Dachshund

A sessile based mass with asymmetrical margination was present at the ventral urinary bladder wall, measuring 2.1 cm x 1.2 cm. The parenchyma of the mass was heterogeneous with focal echogenic foci and mineralization. Doppler evaluation of the mass confirmed blood flow within the mass. Concurrent dependent mineral was also present. The urethra was normal in structure and tone to a depth of 2.0 cm. The ureteral papillae were normal. The ureters were not visible which is normal.

**SEX**

Spayed Female

Normal size and margination was 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 loss of corticomedullary symmetry and definition expected for the age of the patient. Mild pyelectasia noted in both kidneys along with minor dystrophic medullary mineralization. A cranial cortical cyst was noted in the right kidney. The left kidney measured 4.3 cm. The right kidney measured 5.3 cm.

**AGE**

15 Years

**Adrenal Glands**

The left adrenal gland presented generalized enlargement and asymmetrical margination. Non-homogeneous, non-mineralized parenchyma was noted. A focal area of parenchymal expansion was noted, potentially in the area of the phrenicoabdominal vein. Possible early caudal vena cava invasion associated with the left adrenal gland. The left adrenal gland measured 3.1 cm length x 0.75 cm at the cranial pole and 0.88 cm at the caudal pole.

**WEIGHT**

13 Pounds

**INTERPRETED BY**

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

The right adrenal gland was enlarged in size with asymmetrical contour. Non-mineralized, nodular parenchyma noted. The right adrenal gland measured 3.3 cm length x 1.8 cm mid adrenal width and 0.64 cm at the caudal pole.

**IMAGING PERFORMED BY**

Pamela Harrigan, RDCS

**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.

**HOSPITAL NAME**

Pine Banks AH

**Liver**

The liver was mildly enlarged. The parenchyma exhibited generalized mild uniform increased echogenicity. The echotexture of the liver parenchyma was uniform with a mild coarse echotexture. The capsule of the liver was symmetrical in margination. The hepatic and portal vasculature were normal in appearance without signs of congestion. The gallbladder was non distended in size with moderate, non-dependent, mildly organized debris. Focal hypoechoic to anechoic areas noted between the dependent debris and inner luminal wall, suggestive of mucus. The cystic duct and common bile ducts were normal without evidence of dilation.

**REFERRING VET**

Dr. Hasan Syed

**INVOICE**

25810

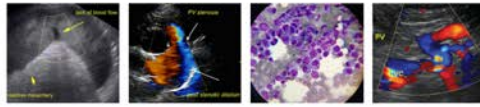
**Gastrointestinal**

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**

9/26/21

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. Segmental jejunal



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mucosal speckling was present. This is non-specific and may be a patient variant or age related intestinal mural changes. Potential for mild enteritis possible if clinically applicable.

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

**SPECIES**

Canine

**Pancreas**

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 changes and considered incidental.

**BREED**

Dachshund

**Free Abdomen**

No overt lymphadenopathy or peritoneal effusion was present.

**SEX**

Spayed Female

**ULTRASONOGRAPHIC FINDINGS**

**AGE**

15 Years

- Mineralized urinary bladder mass – TCC likely.
- Left adrenomegaly with focal parenchymal expansion potentially in area of phrenicoabdominal vein and possible early CVC invasion
- Nodular right adrenomegaly
- Vacuolar hepatopathy
- Moderate gallbladder debris, possible early mucocele
- Chronic renal changes with mild pyelectasia, dystrophic medullary mineralization and right kidney cortical cyst

**WEIGHT**

13 Pounds

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

**INTERPRETED BY**

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

Screening BRAF assay may be considered. However, if negative, biopsy of the mass would be required for definitive diagnosis. However, transitional cell carcinoma is considered highly probable. No overt evidence of regional metastasis.

**IMAGING PERFORMED BY**

Pamela Harrigan, RDCS

The pyelectasia in both kidneys is suspected to be owing to chronic renal changes or potential pelvic scarring owing to previous mineral passage. Blood pressure assessment is recommended. Sonographic monitoring of the bilateral adrenal glands and of the urinary bladder mass would be appropriate if more advanced imaging or aggressive therapy is not elected.

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Pine Banks AH

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**SPECIES**

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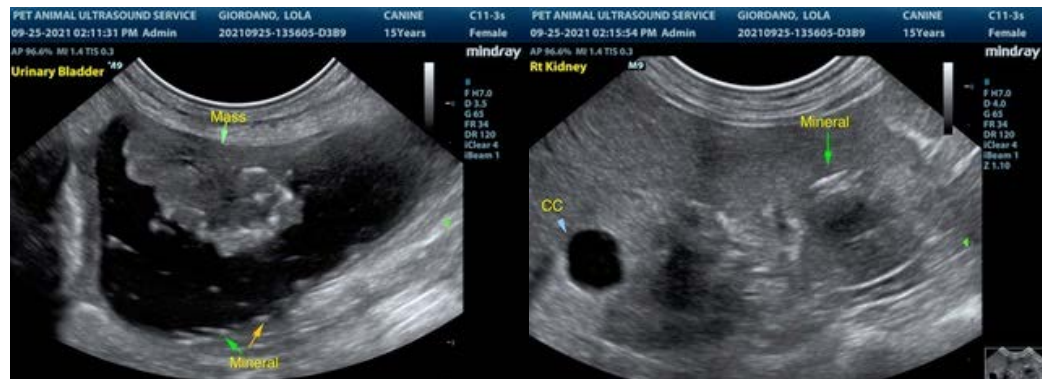
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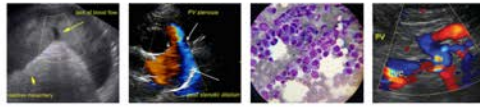
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**PATIENT**

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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.

**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**

Dachshund

R. McKenzie Daniel, DVM, DABVP (Canine / Feline Practice)  
info@SonoPath.com

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