



PATIENT	PRESENTING CLINICAL SIGNS
Luna Monsalve	Patient presents for echo and abdominal ultrasound.
SPECIES	ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN
Canine	Urinary System
BREED	The urinary bladder is moderately distended with anechoic contents. No masses, inflammatory changes, echogenic sediment, or cystoliths are observed. The urinary bladder and trigone are normal in thickness with a smooth mucosal surface. The proximal 2.5 cm of the urethra is thick in appearance with an irregular, heterogeneous hypoechoic wall.
Poodle/Chihuahua Mix	
SEX	The right kidney is normal in size (3.37 cm), shape, and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. Non-obstructive nephroliths noted. There is no evidence of pyelectasia observed.
Spayed Female	
AGE	The left kidney is normal in size (3.22 cm), shape, and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. Non-obstructive nephroliths noted. There is no evidence of pyelectasia observed.
15-year-old	
WEIGHT	Adrenal Glands
8.6 lbs	The right adrenal gland is normal in size (cranial 0.29 cm, caudal 0.31 cm), shape, and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.
INTERPRETED BY	The left adrenal gland is normal in size (cranial 0.42 cm, caudal 0.57 cm), shape, and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.
Beth Johnson, DVM DACVIM	
IMAGING PERFORMED BY	Spleen
Kelly Vazquez	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.
HOSPITAL NAME	Liver
Animal General on Hudson	Liver is subjectively enlarged with mildly irregular margins. Parenchyma is heterogenous characterized by multiple poorly defined hypoechoic nodules within otherwise hyperechoic liver parenchyma. Visible vasculature and biliary tree appear normal without distension or congestion.
REFERRING VET	Gallbladder is moderately distended with anechoic bile as well as suspended and gravity dependent echogenic debris. The wall is smooth without visible thickening. There is no evidence of cystic or CBD dilation. There is no evidence of effusion or inflammation.
Dr. Vivian Ng	
INVOICE	Gastrointestinal
10291	The visible stomach wall is normal in thickness and layering. The lumen of the stomach is mildly distended with echogenic non-shadowing luminal contents and gas consistent with normal ingesta. There is no evidence of obstruction, foreign material, or infiltrative disease. Pyloric outflow tract appears patent.
DATE	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 or foreign material.
6/28/2023	The visible colon is normal in wall thickness (< 0.2 cm) and layering. Contents are consistent with normal formed feces and gas.



PATIENT

Luna Monsalve

SPECIES

Canine

BREED

Poodle/Chihuahua Mix

SEX

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AGE

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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.

There is no apparent lymphadenopathy noted in these images.

ULTRASONOGRAPHIC FINDINGS

- The thick irregular urethra mucosa could be benign inflammatory urethritis. However, infiltrative neoplasia including transitional cell carcinoma cannot be ruled out without additional information.
- **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.
- **Moderate 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 abdominal discomfort, and/or laboratory changes such as increased ALP and/or increased Tbili.
- Non-obstructive nephrolithiasis bilaterally

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Further recommendations for this patient depend on part on history and clinical signs, laboratory changes, etc. Having said that given the appearance of urethra urinalysis and urine culture, if indicated based on urinalysis results, are recommended. Submission of urine to look for BRAF gene mutation, which is associated with urinary bladder/prostate cancer, could be considered. Other diagnostic options include traumatic catheterization, fine needle aspirate (with small risk of tumor seeding/trailing) or cystoscopy for further sampling. In the meantime, empirical therapy with a broad-spectrum antibiotic (or ideally an antibiotic based on culture and sensitivity results) as well as an anti-inflammatory (unless otherwise contraindicated based on patient co-morbidities) may begin to help alleviate clinical signs.

Pending results three view thoracic radiographs are recommended for further assessment of cardio-pulmonary status as well as to further evaluate for any evidence of metastatic disease, if not recently evaluated.



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HOSPITAL NAME

Animal General on
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REFERRING VET

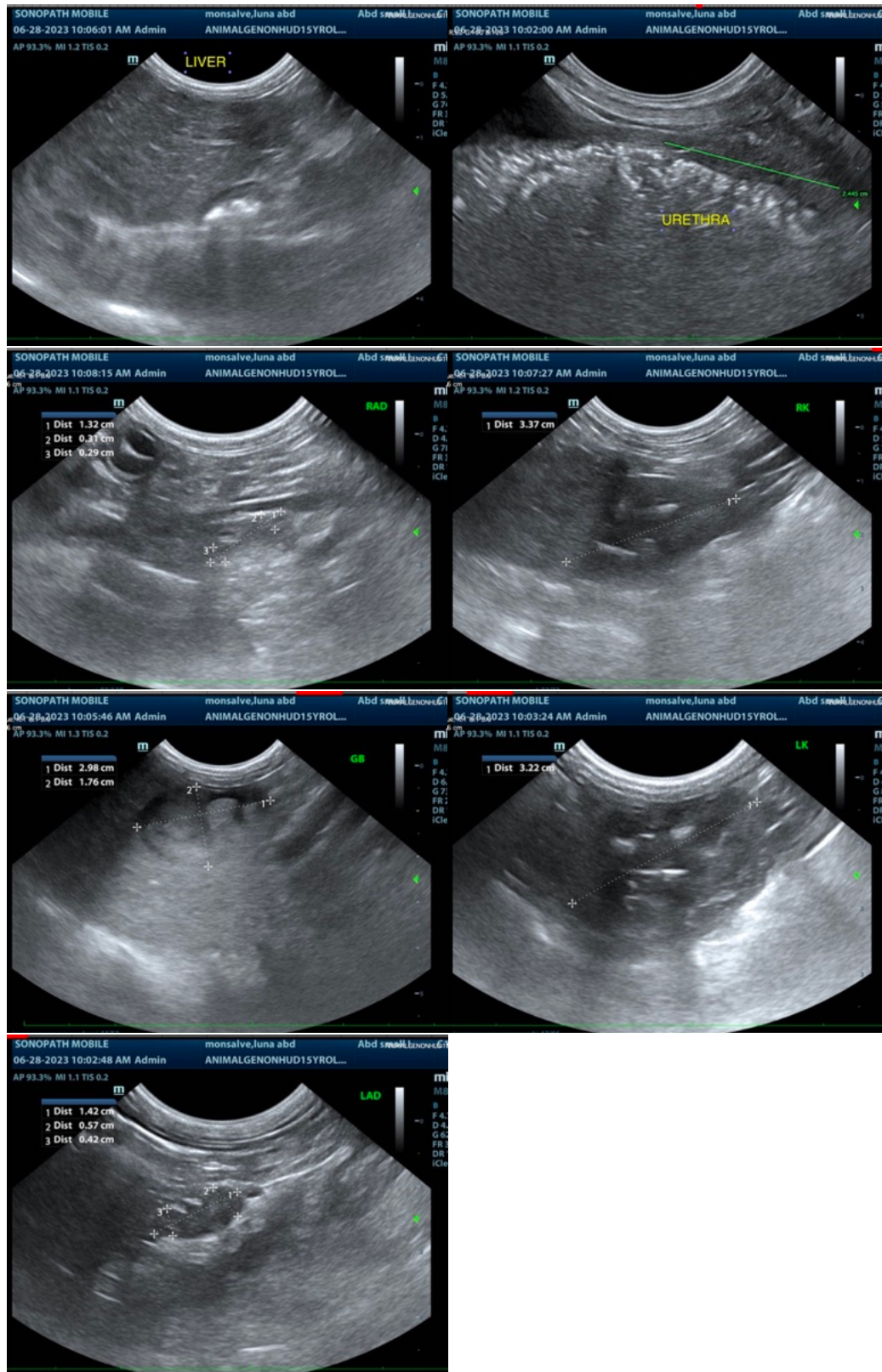
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The information and recommendations provided are based on the images presented by the referring



PATIENT

Luna Monsalve

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.

Beth Johnson, DVM, DACVIM
info@sonopath.com

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SEX

Spayed Female

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15-year-old

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