



PATIENT	PRESENTING CLINICAL SIGNS
Nala Lancaster	Has had 4 consecutive UTIs since November 2022 - not responding to treatment. Suspect stones or bladder mass
SPECIES	ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN
Canine	Urinary System
BREED	The urinary bladder was normal in size and tone with variable ventroapical to dorsoapical bladder wall thickening exhibiting subtle non-homogenous mural echotexture and asymmetrical luminal surface contour. No evidence of mural mineralization. The trigone, cystourethral junction, and visible pelvic urethra to a depth of 3 cm exhibited normal thickness and tone. Mild anechoic urine was present in the lumen with mild dependent to suspect focally adhered luminal mineral to small calculi. The urinary bladder was subnormal in size owing to lack of urine distension which prohibited full evaluation of the urinary bladder walls. No overt bladder tumors.
Shepherd Mix	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 or overt pyelonephritis was present. Pinpoint to minor medullary mineral was present. The left kidney measured 5.6 cm in length. The right kidney measured 5.7 cm in length.
SEX	The area of the aortic trifurcation was free of pathology.
FS	Adrenal Glands
AGE	The left adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 0.49 cm width at the caudal pole and 0.54 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 0.31 cm width at the caudal pole and 0.50 cm width at the cranial pole.
9	Spleen
WEIGHT	The spleen exhibited primarily finely textured and homogenous parenchyma which was hyperechoic to the liver and renal cortical parenchyma. Solitary to multiple well-defined, symmetrical, hyperechoic nodules were present throughout the cranial to caudal 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 or neoplastic changes were not noted. The hyperechoic nodules tend to trend benign and are most consistent with benign hyperplasia or myelolipomas.
30kg	Liver/Gallbladder
INTERPRETED BY	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 primarily anechoic luminal content and mild hyperechoic non-organized debris in the caudal lumen and gallbladder neck. The cystic and common bile ducts were normal.
R. McKenzie Daniel, DVM, DABVP (Canine and Feline)	Gastrointestinal
IMAGING PERFORMED BY	
Dr. Belan	
HOSPITAL NAME	
Cambrian Animal Clinic	
REFERRING VET	
Dr. Sharma	
INVOICE	
13769ag	
DATE	
05/10/2023	



PATIENT

Nala Lancaster

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

SPECIES

Canine

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.

BREED

Shepherd Mix

Pancreas

The parenchyma of the left limb, body and right limb of the pancreas presented isoechoic to the adjacent omental fat. A normal curvilinear capsule contour of the pancreas was present. The visible pancreatic duct was normal. No signs of active inflammation or neoplastic disease was evident.

SEX

FS

Free Abdomen

No omental masses, overt lymphadenopathy or peritoneal effusion was present.

AGE

9

ULTRASONOGRAPHIC FINDINGS

- Chronic cystitis with mild dependent to suspect focally adhered lumen mineral/small calculi.
- Mild bilateral renal medullary mineral-no overt pyelonephritis criteria.
- Benign splenic nodules-consistent with benign myelolipomas.
- Gallbladder debris (non-mucocele).
- Mild hypomotile stomach.

WEIGHT

30kg

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

INTERPRETED BY

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

The hypomotile stomach is of unclear significance given lack of reported inappetence or vomiting. Gastroprotectant protocol is suggested if clinically indicated.

This patient may be passing small amounts of mineral from the kidneys into the urinary bladder. Concern for embedded infection given cystitis criteria may be indicated. Based on C/S results, a higher dose/shorter frequency antibiotic regimen i.e., enrofloxacin 20 mg/kg PO SIF x 3-5 days may prove more effective at eliminating underlying embedded infection. Concurrent urinary diet may also prove beneficial. Neoplastic urinary bladder criteria is considered less likely.

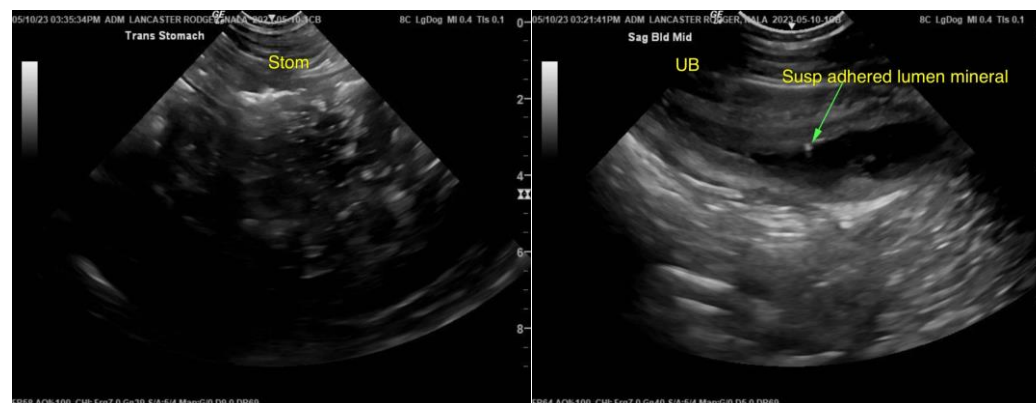
IMAGING PERFORMED BY

Dr. Belan

A urinary bladder wall biopsy for tissue C/S and histopathology with bladder flush may be a consideration.

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SPECIES

Canine

BREED

Shepherd Mix

SEX

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WEIGHT

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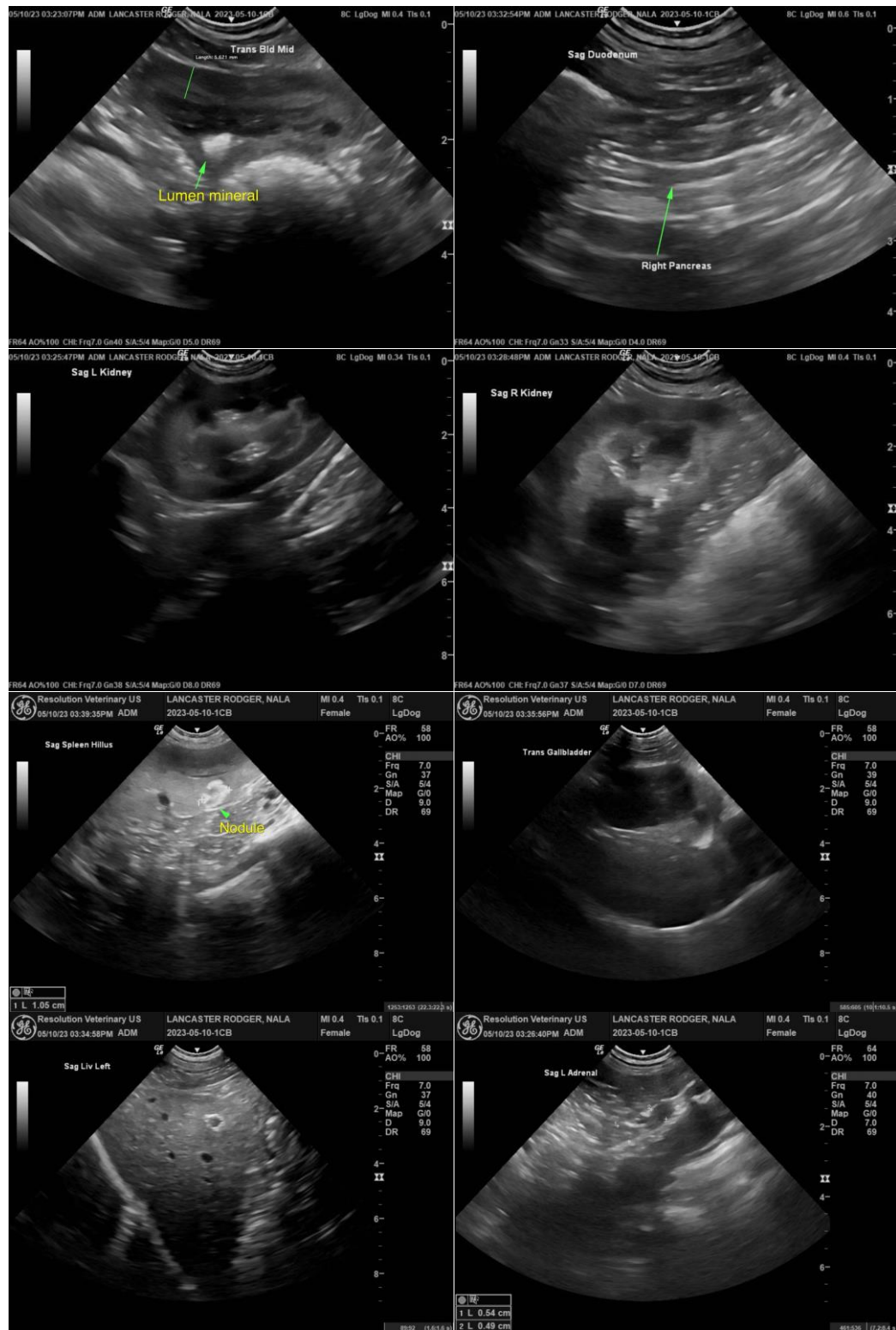
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.



PATIENT

Nala Lancaster

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.

SPECIES

Canine

R. McKenzie Daniel, DVM, DABVP (Canine/Feline Practice)

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BREED

Shepherd Mix

SEX

FS

AGE

9

WEIGHT

30kg

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