



**PATIENT**

Lox Nishiyama

**PRESENTING CLINICAL SIGNS**

History: Elevated early renal marker. Hx crystalluria, Hx pancreatitis. Labs and previous AUS attached.

**SPECIES**

Feline

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**Urinary System**

Urinary bladder is adequately distended. It has a normal uniform wall thickness. Contents include primarily anechoic fluid with occasional echogenic non-shadowing debris, most consistent with incidental suspended lipid in a cat, possibly combined with exfoliated cells, mucous and/or small blood clots. Both sterile inflammation as well as urinary tract infection can also present with echogenic debris. No masses or cystoliths are observed. The trigone and visible pelvic urethra are normal in thickness with a smooth mucosal surface.

**BREED**

DSH

**SEX**

Spayed Female

Left kidney is normal is size (3.5 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, or infarcts observed. Non-obstructive linear multifocal hyperechoic diverticular foci with acoustic shadowing are noted. A chronic infarct was noted in the cranial pole of the left kidney.

**AGE**

12 Years

Right kidney is normal is size (3.88 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, or infarcts observed. Non-obstructive linear multifocal hyperechoic diverticular foci with acoustic shadowing are noted.

**WEIGHT**

9 Pounds

**Adrenal Glands**

Left adrenal gland is normal in size (0.32 cm), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

**INTERPRETED BY**

Beth Johnson, DVM  
DACVIM

Right adrenal gland is normal in size (0.3 cm), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

**IMAGING PERFORMED BY**

Denise Bruno, LVT,  
RDMS

**Spleen**

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.

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**Liver**

Liver is subjectively normal in size with normal smooth curvilinear peripheral contour. Parenchyma is appropriately hypoechoic to the spleen in echogenicity and appropriately mildly coarse and homogenous in echotexture. A small mineral foci is noted, likely an intrahepatic biliary mineral in the deep right liver. No obstructive pattern or evidence of inflammation noted. Visible vasculature and biliary tree appear normal without distension or congestion.

**REFERRING VET**

Dr. Thomson

Gallbladder is non-distended in size. The wall is smooth without visible thickening. Luminal contents are primarily anechoic. There is no evidence of cystic or common bile duct dilation.

**INVOICE**

16805

**Gastrointestinal**

**DATE**

8/9/22



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The visible stomach wall is normal in thickness and layering. The lumen of the stomach is empty with no evidence of obstruction, foreign material or infiltrative disease. Pyloric outflow tract appears patent.

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Feline

The visible small intestines are normal in wall thickness and layering. Small intestinal motility appears adequate (1-3 contractions per min). The lumen of the small intestine is empty with no evidence of obstruction, foreign material or infiltrative disease.

**BREED**

DSH

The visible colon is normal in wall thickness and layering. Contents are consistent with normal formed feces and gas.

**SEX**

Spayed Female

***Pancreas***

Pancreas is prominent in size with swollen irregular contour. Parenchyma is heterogenous characterized by hyperechoic tissue remodeling intermixed with ill-defined hypoechoic nodules. There is no visible pancreatic duct dilation. There is no evidence of active peripancreatic inflammation.

***Free Abdomen***

**AGE**

12 Years

There is no evidence of peritoneal effusion. There is no apparent lymphadenopathy.

**ULTRASONOGRAPHIC FINDINGS**

- Urinary bladder debris
- Bilateral nonobstructive dystrophic mineralization in the kidney, as well as a chronic infarct in the left kidney.
- Incidental intrahepatic biliary mineral (nonobstructive)
- Pancreatic nodular hyperplasia – Infiltrative neoplasia cannot be ruled out but is considered less likely.

**INTERPRETED BY**

Beth Johnson, DVM  
DACVIM

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

**IMAGING PERFORMED BY**

Denise Bruno, LVT,  
RDMS

This is a relatively unremarkable abdomen with no ultrasonographic explanation for the early renal disease marker increase. Recommendations include:

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A urine protein to creatinine ratio given the mild proteinuria reported, to quantify it and determine whether or not management is indicated.

Blood pressure is recommended, if not recently evaluated given the suggestion of early renal disease.

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Dr. Thomson

Otherwise, without clinical signs, no additional management or intervention is required at this time, but recommendation are to recheck kidney values and urinalysis in 3 months or sooner if clinical signs develop.

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**REFERRING VET**

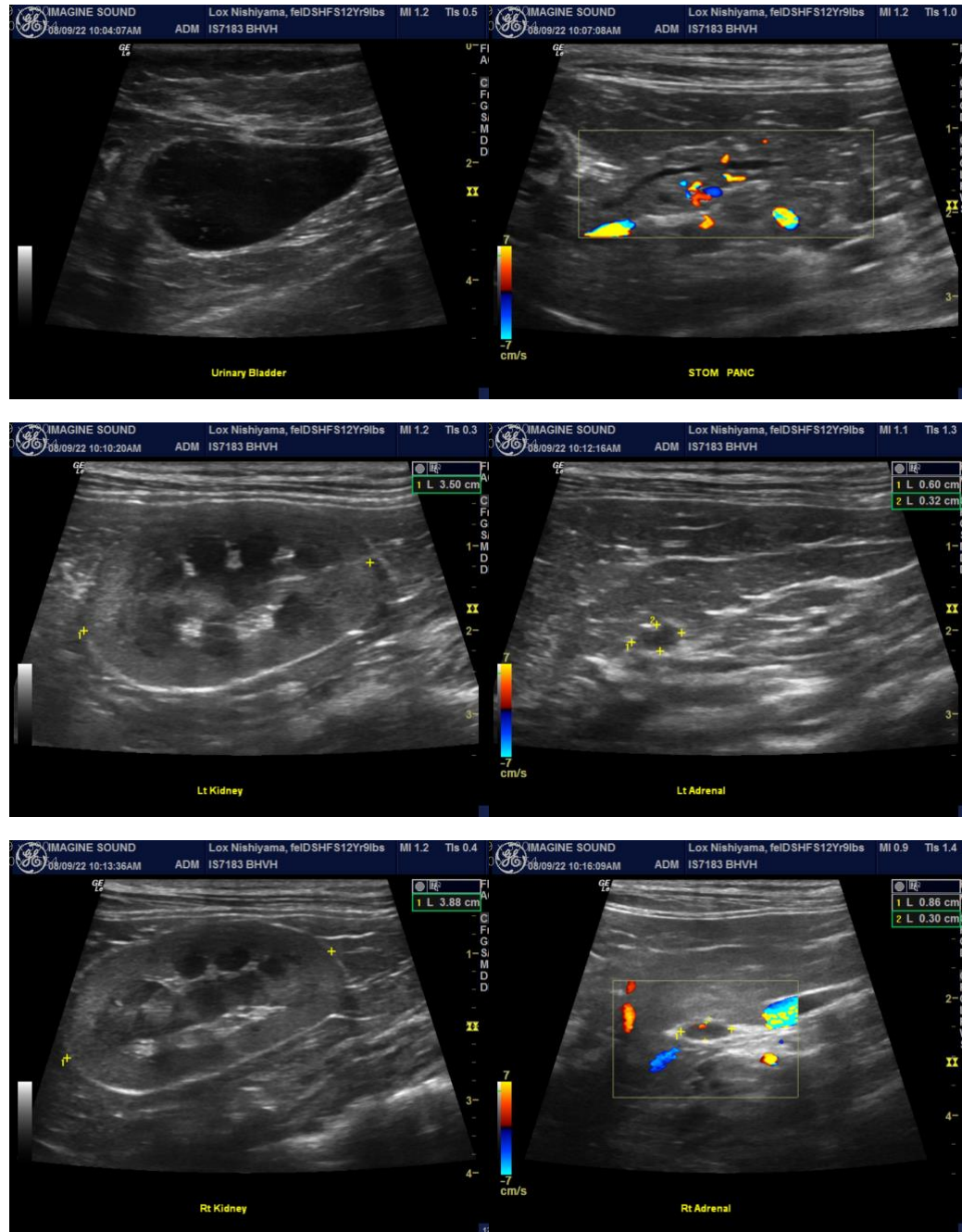
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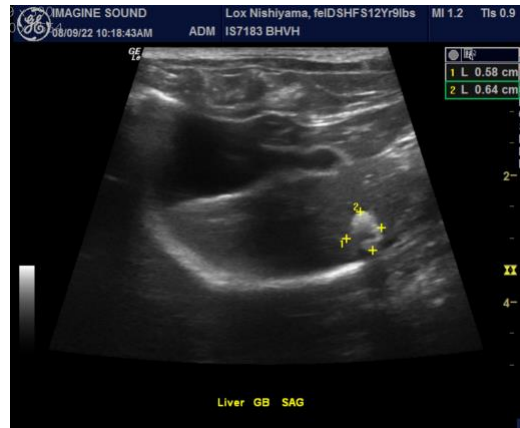
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

**Beth Johnson, DVM DACVIM**

Beth.Johnson@SonoPath.com