



**PATIENT**

Madame Mim Echevarria

**SPECIES**

Feline

**BREED**

Persian

**SEX**

Spayed Female

**AGE**

7 Years

**WEIGHT**

9.5 Pounds

**INTERPRETED BY**

Beth Johnson, DVM  
DACVIM

**IMAGING PERFORMED BY**

Diane McFadden

**HOSPITAL NAME**

AH of Roxbury

**REFERRING VET**

Dr. Elia

**INVOICE**

40071

**DATE**

8/3/22

**PRESENTING CLINICAL SIGNS**

cystotomy performed 11/17/22; increased ALT over time; hx of Ca oxalate crystals. On a urinary diet. Abnormal PE/Chem/CBC/UA Results: ALT 208, trig 185, HCT 53, MCHC 29, RBC 11. UA: protein 2+, some Ca oxalate crystals, USPG 1.036

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**Urinary System**

The urinary bladder is moderately distended with anechoic contents. No masses or inflammatory changes. A cystoliths measuring 0.33 cm in diameter is noted. The urinary bladder, trigone and visible pelvic urethra are normal in thickness with a smooth mucosal surface.

Kidneys are bilaterally irregular and diffusely echogenic with decreased corticomedullary distinction and poor visualization of internal architecture. There is no pyelectasia noted and no mineral is observed. The left kidney is small measuring 2.36 cm, and there is very little normal architecture appreciated. The right kidney is normal in size at 3.68 cm.

**Adrenal Glands**

The right adrenal gland is normal in size (0.37 cm), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

The left adrenal gland is normal in size (0.23 cm), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

**Spleen**

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.

**Liver**

The 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. No focal lesions are observed. Visible vasculature and biliary tree appear normal without distension or congestion.

The 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.

**Gastrointestinal**

The stomach wall is normal in thickness (canine < 0.5 cm and feline < 0.4 cm) and layering. The lumen of the stomach is empty with no evidence of obstruction, foreign material or infiltrative disease. Pyloric outflow tract appears patent.

The visible small intestine demonstrates areas of very mildly thick muscularis layer relative to mucosa (disruption of the normal 1:3 muscularis:mucosa ratio). Small intestinal submucosa is slightly irregular, thick and hyperechoic, without evident loss of layering appreciated. The lumen is empty with no evidence of obstruction or foreign material.

The visible colon is normal in wall thickness (< 0.2 cm) and layering. Contents are consistent with normal formed feces and gas.



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**Pancreas**

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Pancreas is prominent (enlarged) in size, hypoechoic to surrounding tissue and has a mildly irregular undulating contour. Parenchyma is coarse with mixed echogenic remodeling noted. Pancreatic duct dilation is noted.

**SPECIES**

**Free Abdomen**

Feline

There is no evidence of free peritoneal effusion noted in these images.

**BREED**

There is no apparent lymphadenopathy noted in these images.

Persian

**ULTRASONOGRAPHIC FINDINGS**

**SEX**

Spayed Female

- **Inflammatory bowel disease (IBD) pattern** – Thick muscularis has been reported with infiltrative bowel disease including both benign inflammatory disease as well as infiltrative neoplasia such as lymphoma. No aggressive lymphadenopathy, loss of layering, etc. is noted to make lymphoma more probable, but lymphoma cannot be definitively ruled out without tissue sampling.

**AGE**

7 Years

- Chronic active pancreatitis
- Small urinary bladder cystolith noted

**WEIGHT**

9.5 Pounds

- **Chronic Kidney Disease** – This appearance of the kidneys is consistent with chronic kidney disease such as chronic glomerular or interstitial nephritis, chronic pyelonephritis, etc. However, this primarily affects the left kidney.

**INTERPRETED BY**

Beth Johnson, DVM  
DACVIM

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

Given the pancreatic and gastrointestinal changes, especially if clinical signs support gastrointestinal disease, a gastrointestinal malabsorption panel (including cobalamin, folate, TLI and PLI) to Texas A&M GI Laboratory is recommended for further evaluation of GI and pancreatic function.

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A urine culture may be indicated if not recently evaluated.

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Given the reported progressively gradually increasing ALT, a fine needle aspirate of the liver could be considered if patient's coagulation status is appropriate. However, this mild change is likely a secondary reactive change. Therefore, empirical therapy could include a course of empirical antibiotics and hepatic nutraceuticals with monitoring for improvement.

**REFERRING VET**

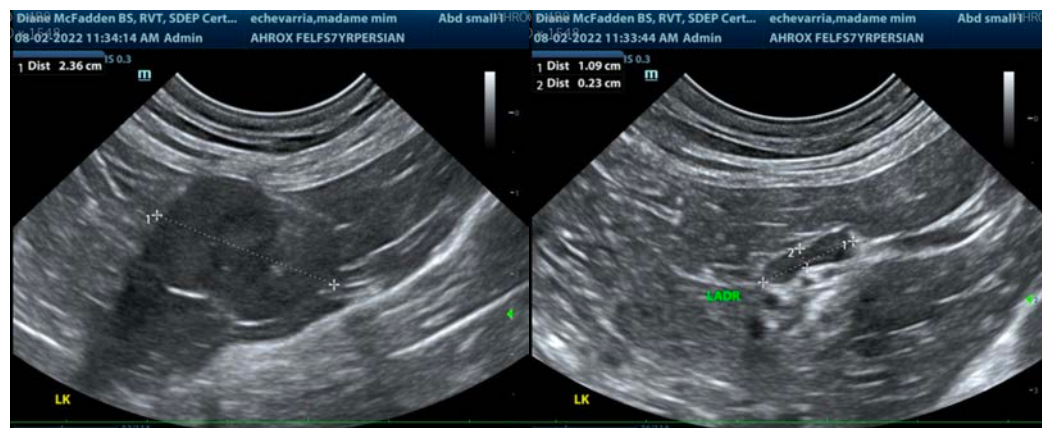
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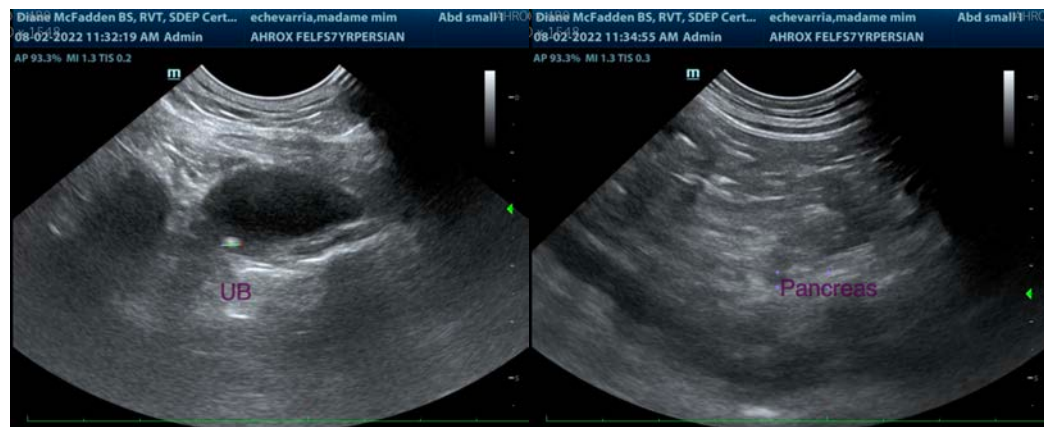
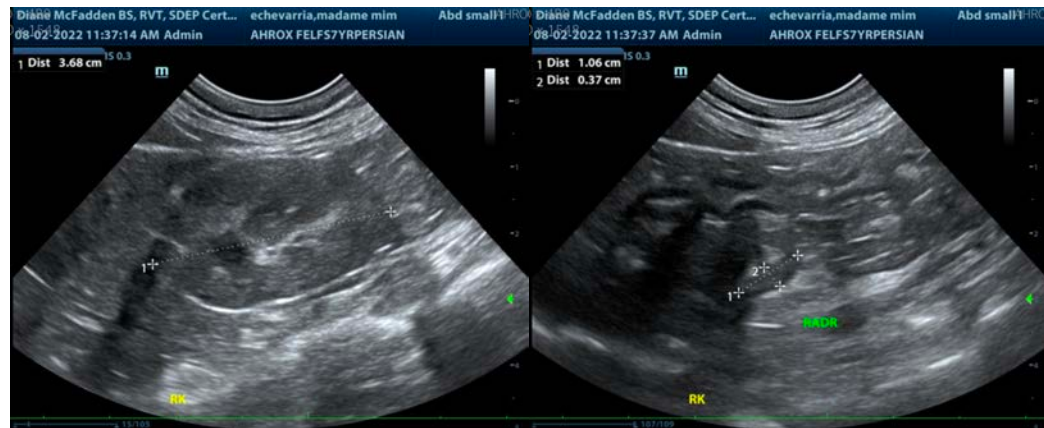
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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