



<b>PATIENT</b>	<b>PRESENTING CLINICAL SIGNS</b>
Matilda Boniface	Pet presented for lethargy, decreased appetite and concerns about weird smell. Pet has a history of stage 1 renal disease that was diagnosed in May. Also history of increased urination in bed while sleeping. Currently on Galliprant.
<b>SPECIES</b>	
Canine	Abnormal PE/Chem/CBC/UA Results: ALP: 162 BUN: > 180 Phosp: > 20.0 Creat: 9.2 Glu: 110 K: 6.2 CBC: HCT: 27.5 %, was 49 in May Plt: 18k, unsure about results, adequate amount on smear. Will confirm with lab
<b>BREED</b>	<b>ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN</b>
Pomeranian	<b>Urinary System</b>
<b>SEX</b>	The urinary bladder is moderately distended with anechoic contents. No masses, inflammatory changes, echogenic sediment or cystoliths are observed. The urinary bladder, trigone and visible pelvic urethra are normal in thickness with a smooth mucosal surface.
Spayed Female	
<b>AGE</b>	The right kidney is normal in size (3.9 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.
13 Years	
<b>WEIGHT</b>	The left kidney is normal in size (3.8 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.
15.9 Pounds	
<b>INTERPRETED BY</b>	<b>Adrenal Glands</b>
Beth Johnson, DVM DACVIM	The area of the right adrenal gland is examined without visualization of the adrenal gland. The caudal pole of the left adrenal gland is normal in size (0.50 cm), shape and contour. The cranial pole is not well visualized.
<b>IMAGING PERFORMED BY</b>	<b>Spleen</b>
Dr. Lynette Reyes	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.
<b>HOSPITAL NAME</b>	<b>Liver</b>
Chain of Lakes AC	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.
<b>REFERRING VET</b>	Gallbladder is subjectively mildly overdistended 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. Lynette Reyes	<b>Gastrointestinal</b>
<b>INVOICE</b>	
42033	
<b>DATE</b>	
10/13/22	



**PATIENT**

Matilda Boniface

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, foreign material or infiltrative disease.

**SPECIES**

Canine

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

**Pancreas**

**BREED**

Pomeranian

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.

**SEX**

Spayed Female

**Free Abdomen**

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

There is no apparent lymphadenopathy noted in these images.

**AGE**

13 Years

**PRIMARY FINDINGS**

- **Adrenal glands unable to be fully visualized** - This could mean that they are flat or small, which could be a normal patient variant or a sign of exogenous cortisol administration, or hypoadrenocorticism could be considered.
- **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.

**WEIGHT**

15.9 Pounds

**SECONDARY FINDINGS**

- Non-obstructive dystrophic mineralization bilaterally in the kidneys

**INTERPRETED BY**

Beth Johnson, DVM  
DACVIM

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

There is no ultrasonographically visible evidence in these images of acute kidney insult. However, given the acute azotemia, ruling out prerenal versus renal is recommended with a urinalysis and, if indicated based on urinalysis results, urine culture. If protein is present in an otherwise quiet sediment, protein quantification with a urine protein to creatinine ration is recommended.

Additionally, a blood pressure is recommended if not recently evaluated, and testing for Leptospirosis is indicated, especially if patient is concurrently isosthenuric.

A baseline cortisol is recommended. If baseline cortisol is less than 2, a full ACTH stimulation test is recommended to rule out hypoadrenocorticism.

**IMAGING PERFORMED BY**

Dr. Lynette Reyes

**HOSPITAL NAME**

Chain of Lakes AC

**REFERRING VET**

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In the meantime, supportive/symptomatic medical management of suspected acute on chronic kidney disease is recommended with IV fluid therapy/diuresis, as well as support of the gastrointestinal signs with antiemetics, gastroprotectants, an appetite stimulant if necessary, and broad-spectrum antibiotics.

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**PATIENT**

Matilda Boniface

**SPECIES**

Canine

**BREED**

Pomeranian

**SEX**

Spayed Female

**AGE**

13 Years

**WEIGHT**

15.9 Pounds

**INTERPRETED BY**

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**IMAGING PERFORMED BY**

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**HOSPITAL NAME**

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**REFERRING VET**

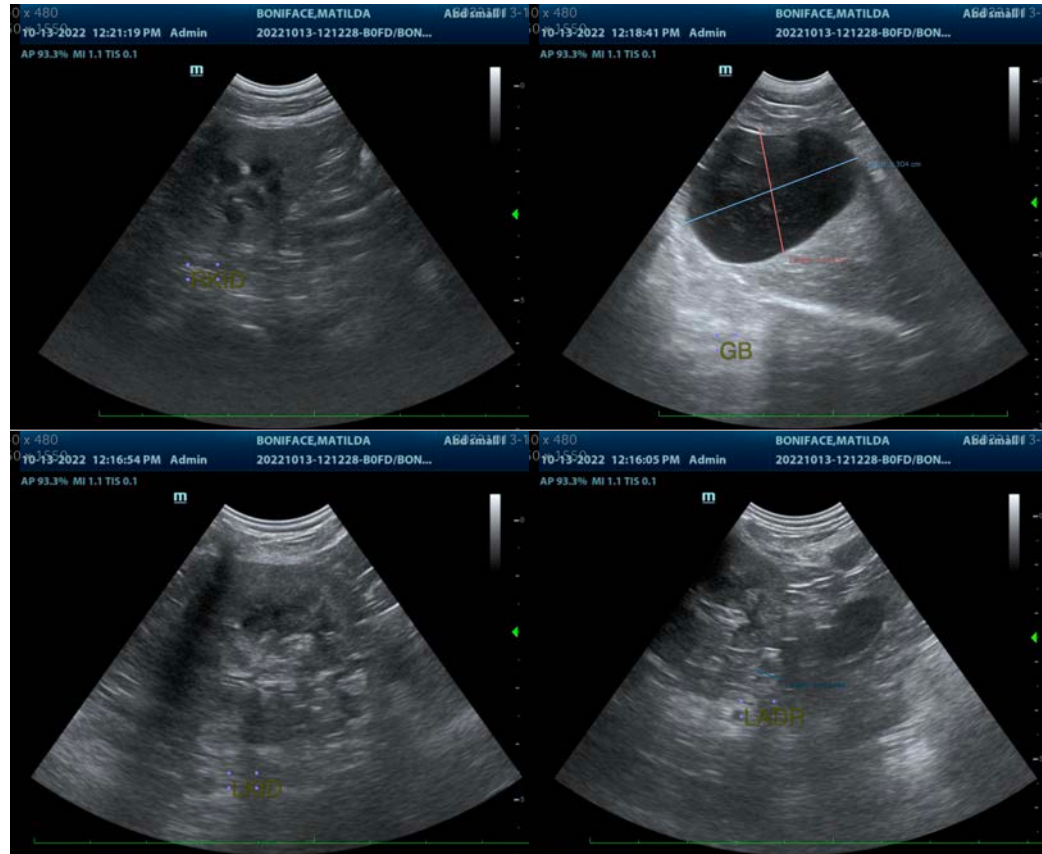
Dr. Lynette Reyes

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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