



**PATIENT**

Penny Arfamann

**PRESENTING CLINICAL SIGNS**

History: Acute onset of PU/PD/vomiting and diarrhea. Bloods WNL except Ca. 15 - ionized Ca. 1.9.

**SPECIES**

Canine

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**Urinary System**

Urinary bladder is adequately 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.

**BREED**

Boxer

Left kidney is normal in size (5.74 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, mineral or infarcts observed.

**SEX**

Intact Female

Right kidney is normal in size (7.46 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, mineral or infarcts observed.

**AGE**

6 Years

**Adrenal Glands**

Left adrenal gland is normal in size (2.27 cm long x 1.1 cm at cranial pole and 0.53 cm at caudal pole), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal. A hyperechoic nodule is noted in the cranial pole of the left adrenal gland. The nodule does not disrupt normal shape and/or architecture.

**WEIGHT**

70 Pounds

Right adrenal gland is normal in size (3.1 cm long x 1.1 cm at cranial pole and 0.39 cm at caudal pole), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

**INTERPRETED BY**

Beth Johnson, DVM  
DACVIM

**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.

**IMAGING PERFORMED BY**

Kelly Vazquez

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

**HOSPITAL NAME**

New Bridge VP

**REFERRING VET**

Dr. Abina Glennon

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**

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The visible stomach wall is normal in thickness and layering. The lumen of the stomach is mildly distended with very echogenic reverberation artifact from intraluminal gas. There is no evidence of obstruction, foreign material or infiltrative disease; however, complete visualization of far wall is partially inhibited by gas. Pyloric outflow tract appears patent.

**DATE**

8/24/22



<b>PATIENT</b>	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.
Penny Arfamann	
<b>SPECIES</b>	The visible colon is normal in wall thickness and layering. Contents are consistent with normal formed feces and gas.
Canine	<b>Pancreas</b>
<b>BREED</b>	The observed pancreas appears appropriately isoechoic to surrounding omental fat. Visible capsule is smooth and normal in contour. Visible pancreatic parenchyma is homogenous and unremarkable. There is no visible pancreatic duct dilation. There is no evidence of active peripancreatic inflammation.
Boxer	<b>Free Abdomen</b>
<b>SEX</b>	There is no appreciable free fluid. There are several hypoechoic distorted/irregular masses dorsal to the urinary bladder in the area of the aortic bifurcation, most consistent with medial iliac lymph nodes.
Intact Female	
<b>AGE</b>	
6 Years	<ul style="list-style-type: none"> <li>Aggressive medial iliac lymph nodes – most consistent with infiltrative round cell or metastatic neoplasia. A benign aggressive inflammatory response cannot be ruled out without tissue sampling +/- culture. A uterine lesion cannot be definitively ruled out, given the location of the most aggressive appearing lymph node, however, medial iliac lymphadenopathy is considered most likely.</li> </ul>
<b>WEIGHT</b>	<ul style="list-style-type: none"> <li>Hyperechoic adrenal nodule in the cranial pole of the left adrenal gland – Differentials include primary adrenal cortical adenoma or adenocarcinoma, pheochromocytoma, myelolipoma, adrenal hyperplasia secondary to pituitary disease or metastatic disease. Ultrasound alone cannot differentiate between functional and non-functional nodules and/or between benign and malignant disease. Small nodules without other evidence of abdominal disease (to suggest metastatic disease) and/or clinical signs (to suggest adrenal disease) are most often incidental and should be monitored.</li> </ul>
70 Pounds	
<b>INTERPRETED BY</b>	<b>ULTRASONOGRAPHIC FINDINGS</b>
Beth Johnson, DVM DACVIM	
<b>IMAGING PERFORMED BY</b>	<b>INTERPRETATION OF THE FINDINGS &amp; FURTHER RECOMMENDATIONS</b>
Kelly Vazquez	Given this patients reported hypercalcemia, top differentials include metastatic medial iliac lymphadenopathy, secondary to an anal gland adenocarcinoma versus (less likely) lymphoma. A benign process and hypercalcemia of a different etiology is possible but considered less likely. Therefore, recommendations include:
<b>HOSPITAL NAME</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>
New Bridge VP	<ul style="list-style-type: none"> <li>A thorough rectal and perianal exam, if not recently evaluated.</li> </ul>
<b>REFERRING VET</b>	<ul style="list-style-type: none"> <li>A fine needle aspirate of the enlarged medial iliac lymph nodes, if patients coagulation status is appropriate.</li> </ul>
Dr. Abina Glennon	
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**IMAGING PERFORMED BY**

Kelly Vazquez

**HOSPITAL NAME**

New Bridge VP

**REFERRING VET**

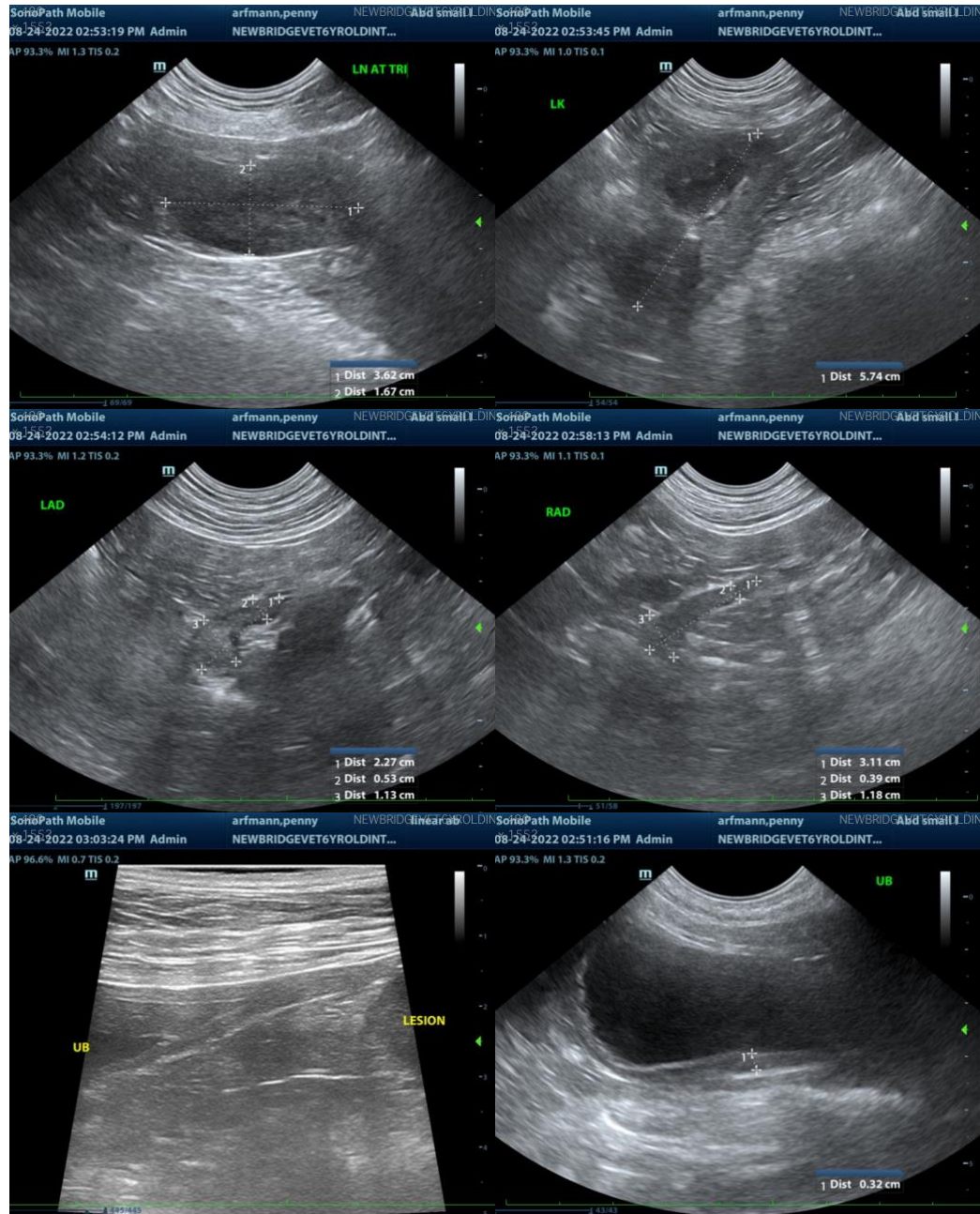
Dr. Abina Glennon

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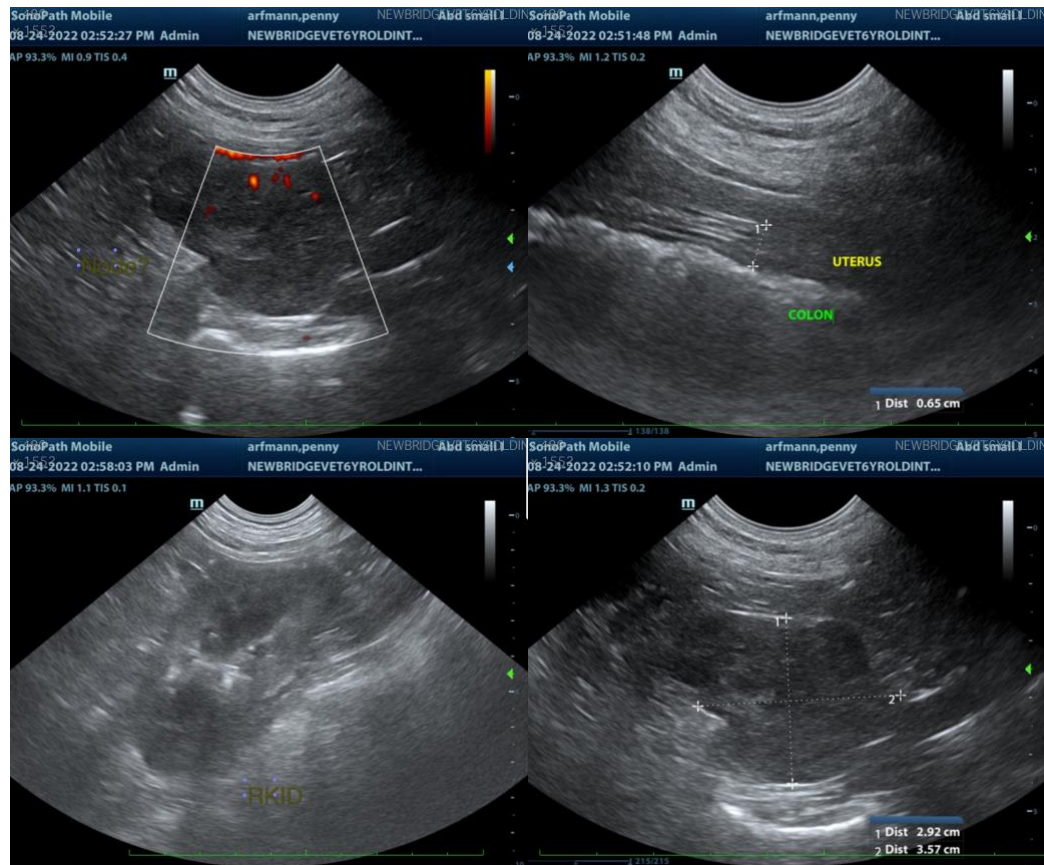
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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