



<b>PATIENT</b>	<b>PRESENTING CLINICAL SIGNS</b>
Brutus Armstrong	Anorexia, orange diarrhea. x 1-2 weeks.
<b>SPECIES</b>	rDVM lab work unremarkable a week ago. Today mild liver elevations Ca++ 1.96
Canine	<b>ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN</b>
<b>BREED</b>	<i>Urinary System</i>
Lab Mix	The urinary bladder presented uniformly thickened urinary bladder wall isoechoic to the adjacent normal urinary bladder wall. The luminal margin of the thickened urinary bladder wall was mildly asymmetrical in contour. Mineralization or echogenic foci within the thickened areas of urinary bladder wall was not present. The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra exhibited normal tone. Anechoic urine was present in the lumen with areas of pinpoint to focal dependent to suspect adhered luminal mineral. The ureteral papillae were normal. The ureters were not visible which is normal.
<b>SEX</b>	
MN	Normal size and margination was present in the left kidney. A normal 1:3 cortex / medulla ratio was maintained. The medulla and cortex was 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 was present. The left kidney measured 6.6 cm in length.
<b>AGE</b>	The right kidney was indistinctly visualized with no overt pathology.
11	
<b>WEIGHT</b>	The area of the aortic trifurcation was free of pathology.
30	<i>Adrenal Glands</i>
<b>INTERPRETED BY</b>	The left and right adrenal glands were not definitively visualized. No obvious pathology was present in the area of the bilateral adrenal glands.
R. McKenzie Daniel, DVM, DABVP (Canine and Feline)	<i>Spleen</i>
<b>IMAGING PERFORMED BY</b>	The spleen exhibited subjective mild enlargement with primarily maintained symmetrical capsule contour and generalized mild parenchyma heterogeneity. Multifocal small well demarcated hypoechoic nodules were present with some exhibiting mild central hyperechogenicity. The splenic vasculature at the hilus was normal in volume with no evidence of congestion or thrombosis.
Natasha Stanley	<i>Liver/Gallbladder</i>
<b>HOSPITAL NAME</b>	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 minor non-organized echogenic debris. The cystic and common bile ducts were normal.
Viking Veterinary Hospital	<i>Gastrointestinal</i>
<b>REFERRING VET</b>	The stomach presented intact wall layering with a normal wall layer ratio. The lumen of the stomach was empty with no signs of ileus, obstruction or foreign material.
Natasha Stanley	
<b>INVOICE</b>	The intestinal walls demonstrated intact wall layering and maintained 1:3 muscularis / mucosa ratio. The mucosa exhibited mild decreased echogenicity with occasional mucosal speckling. Minor segmental ileus pattern consisting of mild fluid accumulation in the intestinal lumen was present without obstruction or foreign material.
13490ag	
<b>DATE</b>	
04/16/2023	



**PATIENT**

Brutus Armstrong

The colon walls presented intact yet prominent wall layering with mild thickened to echogenic submucosa. Nonformed to liquid fecal matter was present in the colon lumen with lumen dilation.

**Pancreas**

**SPECIES**

Canine

The pancreas was normal in size and contour with isoechoic to heterogeneous parenchyma compared to adjacent omentum, likely consistent with age related changes or potential low grade chronic inflammation. No signs of active inflammation or neoplasia.

**BREED**

Lab Mix

**Free Abdomen**

No omental masses or peritoneal effusion was present.

**SEX**

MN

Multiple enlarged mid abdominal mesenteric lymph nodes were present. These lymph nodes were homogenous, mildly hypoechoic and smoothly marginated. A normal width: length ratio was maintained (<0.5). Evidence of perilymphatic inflammation was evident. An example of lymph node size was - cm x - cm.

**ULTRASONOGRAPHIC FINDINGS**

**AGE**

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- Hypoechoic, variably enlarged to swollen mesenteric lymphadenopathy - strongly suggestive of round cell neoplastic criteria, possible lymphadenitis.
- Multifocally nodular spleen - hyperplasia, hematopoiesis, neoplasia possible.
- Hepatomegaly - benign / inflammatory, infiltrative neoplasia possible.
- Mild gallbladder debris - non mucocele, possible mild cholecystitis.
- Enterocolitis.

**WEIGHT**

30

**Secondary findings**

- Mild chronic left kidney.
- Cystitis pattern with pinpoint mineral.
- Heterogenous pancreas- patient/ age related variant, remodeling owing to previous inflammatory episode or mild to chronic pancreatitis possible.

**INTERPRETED BY**

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

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

**IMAGING PERFORMED BY**

Natasha Stanley

Strong concern for multi centric round cell neoplasia involving mesenteric lymph nodes, spleen, possibly liver or early gastrointestinal tract. FNA cytology +/- C/S of accessible mesenteric lymph node, spleen and liver assuming normal clotting status is recommended and considered essential for further assessment and possible oncology consult.

**HOSPITAL NAME**

Viking Veterinary Hospital

Empirical therapy for enterocolitis and hepatic support would be reasonable.

**REFERRING VET**

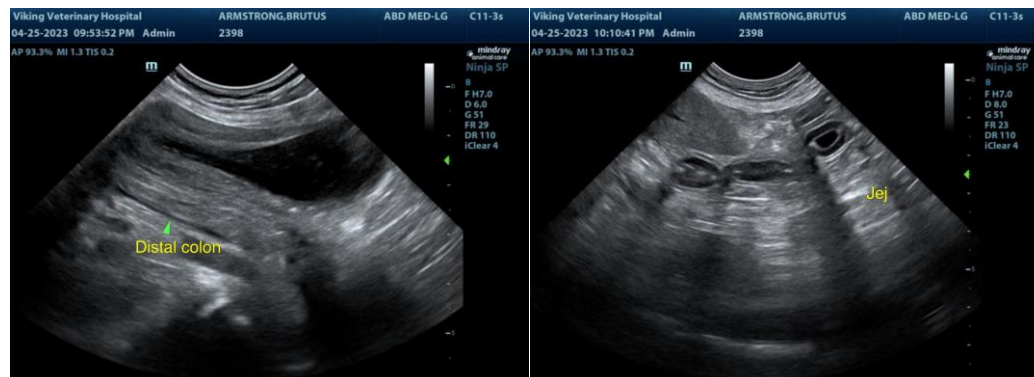
Natasha Stanley

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**PATIENT**

Brutus Armstrong

**SPECIES**

Canine

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Lab Mix

**SEX**

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**AGE**

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(Canine and Feline)

**IMAGING PERFORMED BY**

Natasha Stanley

**HOSPITAL NAME**

Viking Veterinary Hospital

**REFERRING VET**

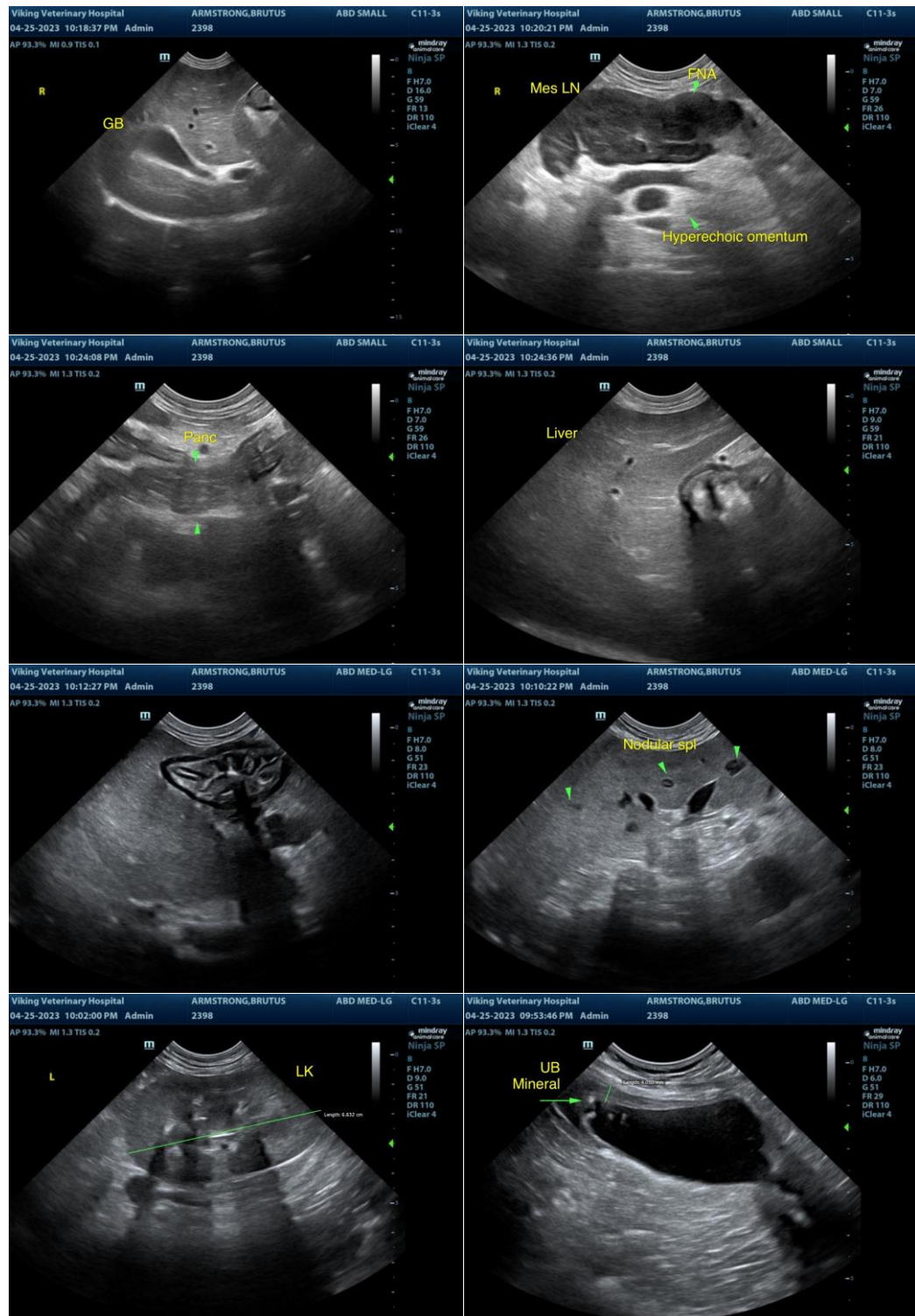
Natasha Stanley

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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**

Brutus Armstrong

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

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Lab Mix

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