**DATE PRESENTING CLINICAL SIGNS**

7/14/22 Intermittent anemia beginning 12/14/22. History of suspected autoimmune.

**PATIENT**

Quinn Clickner Current Medications: Monthly adequate injections begun 2/17/2022, Boswellia complex 1 tab BID begun 1/24/22, Canine Immune Support Supplement from Standard Process 1 tsp BID begun 12/14/21  
Lab Results: 7/13/22- low rbc 5.21, low hct 37.1, low hgb 12.7  
also presented with anemia 12/14/21.

**SPECIES**

Canine Date of Previous IntraPet Ultrasound: No previous.  
Sedation: Not required to complete full diagnostic ultrasound.  
Stat Report: Not requested.

**BREED**

Great Dane

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN****Urinary System****SEX**

Female The urinary bladder is moderately distended with anechoic urine. The Bladder wall, trigone, ureteral papillae and visible urethra (to a depth of 2cm) appear normal with no evidence of wall thickening, mucosal irregularities, masses or cystic calculi.

**AGE**

5/19/21 The left kidney has a normal shape and size (9.3 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

**WEIGHT**

124.6 Pounds

The right kidney has a normal shape and size (6.01 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

**INTERPRETED BY**

Kathleen Sennello DVM,  
MS, Diplomate ACVIM  
(Small Animal Internal  
Medicine)

**Adrenal Glands**

The left adrenal gland is normal in size measuring 0.65 cm at the caudal pole. It is observed in its normal position cranial to the left renal artery. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

**IMAGING PERFORMED BY**

Rachel Brilhart RDMS

The right adrenal gland is normal in size measuring 0.71 cm at the caudal pole. It is observed in its normal position between the cranial aspect of the right kidney and the caudal vena cava. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

**HOSPITAL NAME**

Happy Tails VH

**Spleen**

The spleen is subjectively normal in size, echotexture is homogenous, and the splenic capsule is smooth with no irregularities. The blood flow through the hilus and splenic parenchyma appears normal. No focal parenchymal abnormalities are visualized.

**REFERRING VET**

Dr. Calpeno

**Liver**

The liver is subjectively normal in size, and echogenicity with smooth peripheral margins. The parenchyma is homogenous echotexture. The visible portions of the vasculature and biliary tract appear normal. No focal nodules or cystic lesions are observed.

**INVOICE**

39532

The gallbladder lumen is moderately distended. The wall of the gall bladder is not thickened and has a smooth mucosal surface. Luminal contents are primarily anechoic. The cystic and common bile ducts are normal/not visible.

### ***Gastrointestinal***

The stomach contains minimal luminal contents. It measures at a normal thickness of <0.7cm with some variability due to the presence of rugal folds. The distinction of the gastric wall layers is adequate and there is no impression of reduced peristaltic activity. No masses or focal lesions were observed.

The visualized areas of duodenum, jejunum and ileum have a relatively uniform diameter with minimal fluid distension. Wall thickness is normal. Bowel loops follow a curvilinear path with distinct wall layering maintaining the typical 1:3 muscularis:mucosa layer ratio. The duodenum measured as normal (between 0.3-0.5cm in wall thickness) and the jejunum measured as normal (between 0.2-0.47cm.) Visualized peristalsis appears appropriate. There were no focal lesions consistent with obstruction or a mass effect observed.

The ileocecal junction was visualized and exhibited normal intact wall layering and is subjectively of normal thickness. Sections of colon are visualized with formed fecal material and gas shadowing distally. There is no observed focal or generalized colon wall thickening or loss of layering.

### ***Pancreas***

The pancreas is normal and isoechoic to surrounding mesentery. There is no evidence of nodules or cystic lesions. There is no evidence of regional mesenteric inflammation or fluid.

### ***Free Abdomen***

Evaluation of the peritoneal cavity did not reveal any evidence of effusion. There is a prominent sublumbar lymph node measuring 1.22 cm in diameter. The omentum is of normal echogenicity.

### ***Other***

Both the left and right ovaries are visualized and appear within normal limits. The left ovary measures 2.06 cm in length. The right ovary measures 1.77 cm in length.

The uterus is visualized. The left uterine horn appears normal and non-dilated. The right uterine horn is dilated, measuring 1.75 cm in diameter with echogenic fluid within the structure.

## **ULTRASONOGRAPHIC FINDINGS**

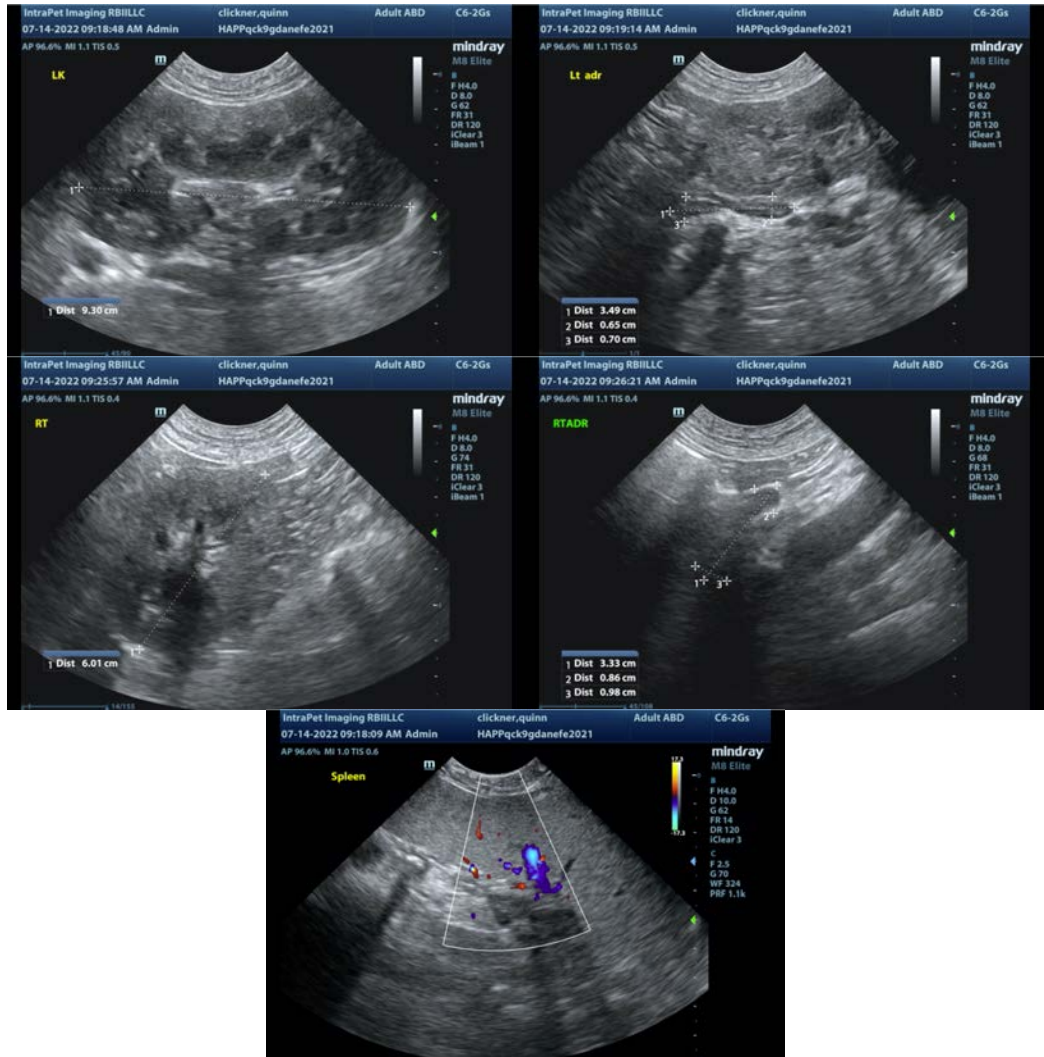
- Right uterine horn dilated with echogenic fluid – This could be consistent with a pyometra, mucometra, other.
- Prominent sublumbar lymph node – The prominent abdominal lymph nodes are most consistent with reactive lymphadenitis or lymphoid hyperplasia. Neoplastic infiltration is considered less likely.

## **INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

There is echogenic fluid visualized within a dilated right uterine horn. While I do not suspect this is an overt area of hemorrhage, etc., I would consider ovariohysterectomy to rule out chronic infection or other pathology involving the uterus as a chronic antigenic stimulus. Additionally, I would consider an ACTH stimulation test to rule out Addison's disease as the left adrenal gland appears somewhat "flat".

With a low albumin and mild anemia, blood loss would be a concern, so consider screening for GI parasites and empirical treatment. Recommend testing for Addison's, but additionally you could consider a liver function test, as this could be an anemia of chronic disease associated with the hypoalbuminemia.





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.

Kathleen Sennello DVM,MS, Diplomate ACVIM (Small animal Internal Medicine)  
 kathleen.sennello@sonopath.com