

**DATE**

12/6/21

PRESENTING CLINICAL SIGNS

History: Dog has progressive borderline anemia, had episode of bloody diarrhea, currently no GI issue, owner like to investigate cause of regenerative anemia.

PATIENT

Kirby Huminski

Lab Results: AlkP 217.

Date of Previous IntraPet Ultrasound: No previous IntraPet scans.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

SPECIES

Canine

BREED

Miniature Schnauzer

SEX

Male, neutered

AGE

2/25/11

WEIGHT

16 lbs.

INTERPRETED BY

Andrea Nicastrò, DVM,
 Diplomate ACVIM
 (Small Animal Internal
 Medicine)

IMAGING PERFORMED BY

Rachel Brillhart RDMS

HOSPITAL NAME

Glen Burnie AH

REFERRING VET

Dr. Shah

INVOICE

12646

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**Urinary System**

The urinary bladder, trigone, and pelvic urethra are normal in thickness and the mucosal surface is smooth. The bladder lumen is moderately distended with anechoic urine. No masses, inflammatory changes or calculi are observed. Ureteral papillae and visualized portion of the proximal urethra, visible to a depth of 2 cm, are normal.

The prostate is normal in size (0.80 cm in width) and shape. Parenchyma is homogenous. The prostatic urethra appears normal without evidence of dilation or obstruction.

The left kidney is normal size (5.52 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with normal corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydronephrosis. Renal vasculature is normal.

The right kidney is normal size (4.01 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with normal corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydronephrosis. Renal vasculature is normal.

Adrenal Glands

The left adrenal gland is normal size (0.56 cm at cranial pole) (0.49 cm at caudal pole) (2.40 cm in length); normal shape; homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

The right adrenal gland is normal size (0.82 cm at cranial pole) (0.55 cm at caudal pole) (1.98 cm in length); normal shape; homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

Spleen

The spleen is not definitively visualized. No obvious abnormalities are observed in the splenic fossa.

Liver

The liver is subjectively normal in size with normal curvilinear peripheral contours. The parenchyma is hypoechoic relative to the spleen and exhibits a finely heterogeneous pattern. No distinct focal lesions are observed. Vascular and biliary tracts are of normal volume with no evidence of congestion. The gall bladder lumen is moderately distended. The wall is thin and smooth. A small to moderate amount of aggregated echogenic partially dependent debris is observed within the lumen. The cystic and common bile ducts are normal/not seen.

Gastrointestinal

The gastric lumen is not distended. The gastric wall in the region of the fundus is normal in thickness with a normal layering pattern. In the region of the pyloric antrum, the muscularis layer is prominent. The pyloric outflow tract is patent. The small intestinal lumen is not dilated. The small intestinal wall thickness is normal with a normal layering pattern and appropriate mural detail. Discreet masses are not identified. The colonic wall is normal. No obstructive disease is noted.

Pancreas

The right limb of the pancreas is visible with normal curvilinear peripheral contours. The parenchyma is largely isoechoic relative to surrounding omental fat and slightly mottled in appearance. The pancreatic duct is visible but not overtly dilated. There is no evidence of peripancreatic inflammation or effusion.

Free Abdomen

The peritoneal cavity is normal. There is no evidence of inflammation or effusion. The abdominal lymph nodes are normal/not visible.

ULTRASONOGRAPHIC FINDINGS

- Age-related pancreatic remodeling/fibrosis.
- The prominent pyloric antrum may represent a region of inflammation, hypertrophy or may be a normal variant for this patient. Emerging neoplasia is possible but considered less likely.
- The lack of visible spleen may indicate a previous splenectomy (not in history) or an extremely small/contracted spleen.

*An obvious cause for the patient's borderline regenerative anemia is not identified in this study. Considerations include blood loss, hemolysis or normal variation.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- If an aggressive approach is desired, consider the following:
 1. Slide agglutination test.
 2. A comprehensive tick panel, including PCR and serology (submission to North Carolina State University's Vector Borne Disease Diagnostic Lab) is recommended.
<https://cvm.ncsu.edu/research/labs/clinical-sciences/vector-borne-disease/>.
 3. Upper GI endoscopy to assess for bleeding gastric/duodenal ulcers.
 4. Three-view thoracic radiographs are recommended to assess for occult neoplasia in the chest.
- If a more conservative approach is desired, consider empirical treatment for gastric ulceration (i.e., proton pump inhibitor/sucralfate for 14 days) with a recheck CBC and reticulocyte count (send to an outside lab). If changes are similar, a more advanced workup may be warranted.





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.

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