

**DATE PRESENTING CLINICAL SIGNS**

8/19/21 History: Lethargy and anemia on cbc.

PATIENT Current Medications: Prednisone 1mg/kg and doxy 10mg/kg

Kingston Kuchling Lab Results: HCT 25, PCV confirmed at 28%. 4dX negative. Fecal negative.

SPECIES Date of Previous IntraPet Ultrasound: No previous

Canine Sedation: not needed

BREED Stat Report: not requestedChihuahua **ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN****SEX** *Urinary System*

Male Neutered The urinary bladder is moderately distended. The wall is normal in thickness with a smooth mucosal surface. Two small cystic calculi measuring approximately 0.30 cm are observed within the lumen. The region of the trigone and the visible portion of the proximal urethra are normal.

AGE

2014 The prostate is normal in size (0.71 cm in width) and shape. Parenchyma is homogenous. The prostatic urethra appears normal without evidence of dilation or obstruction.

WEIGHT

17.77 lbs. The left kidney is normal size (4.96 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

INTERPRETED BYAndrea Nicastro, DVM,
Diplomate ACVIM
(Small Animal Internal
Medicine)

The right kidney is normal size (4.17 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

HOSPITAL NAME

Banfield Towson

Adrenal Glands

The left adrenal gland is normal size (0.55 cm at cranial pole) (0.46 cm at caudal pole) (1.35 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.

REFERRING VET

Dr. Culbertson

The right adrenal gland is normal size (0.62 cm at cranial pole) (0.53 cm at caudal pole) (1.63 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.

INVOICE

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Spleen

The spleen is normal in size (1.07 cm in width at the level of the hilus) with a normal capsular contour. There is appropriate echogenicity and echotexture. No focal lesions are observed. Splenic vasculature is normal.

Liver

The liver is subjectively normal in size with normal contours and structure. There is appropriate echogenicity and echotexture. No overt structural evidence of inflammatory, infiltrative, or regenerative pathology is evident. Vascular and biliary tracts are of normal volume with no evidence of congestion. No pathological hepatic lymphadenopathy observed. The gall bladder lumen is moderately distended. The wall is thin and

smooth. A moderate amount of aggregated, echogenic, partially dependent debris/sludge is observed within the lumen. The cystic and common bile ducts are normal/not seen.

Gastrointestinal

The stomach and intestine are free of stasis and exhibit normal peristaltic activity. The gastric lumen is not distended. The gastric wall and pylorus are normal in thickness with a normal layering pattern. 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

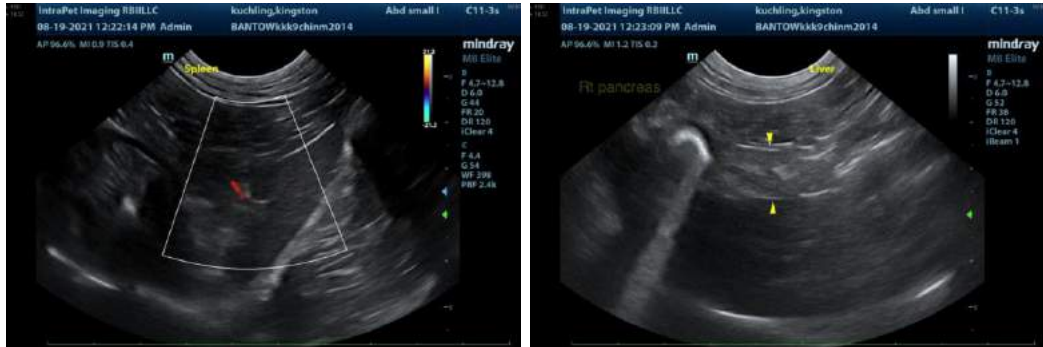
- Small cystic calculi
- The pancreatic changes are most consistent with age-related parenchymal remodeling, potentially secondary to a prior inflammatory episode, early fibrosis, or chronic pancreatitis.
- Minor, age-related renal pathology.

**An obvious cause for the patient's anemia is not identified in this study.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

1. Three-view thoracic radiographs are recommended to assess for occult neoplasia.
2. A CBC (send to an outside lab) with a reticulocyte count is recommended to determine if the anemia is regenerative versus non-regenerative. If the anemia is regenerative, hemolysis and blood loss (i.e., GI) are considerations. If the anemia is non-regenerative, a bone marrow aspirate may be warranted.
3. 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/>
4. Regarding the cystic calculi, consider an attempt at medical dissolution (i.e., via antibiotics and a prescription urinary diet). A recheck ultrasound of the urinary bladder is recommended in 4 weeks. If there is no evidence of dissolution, consider a cystotomy with stone removal and analysis (once the patient's anemia has resolved). If the stones are dissolving, continued medical therapy would be recommended until complete dissolution has occurred.





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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