

**DATE PRESENTING CLINICAL SIGNS**

7.7.2023 Grade IV-V/IV HM, arrhythmia, upper respiratory sounds that are worse. Lethargy, decreased appetite

PATIENT

Pollyanna McCracken

Current Medications: Enalapril 2.5 mg 1 BID, Vetmedin 2.5 1 + 1/2 BID, Pepcid unsure, Lasix 20 mg 1 BID
 Cerenia 60 mg 1/2 QD, Cefpoderm 1 QD, Gabapentin 100 mg 1-3 BID as needed, Denamarin small dog 1 QD

Lab Results: ALP 700, Chloride 98

Radiographs: Some loss of detail mostly on the R side. Chest rads - enlarged heart, possibly larger than the rads from Reb 2023

SPECIES

Canine

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

BREED

KCC Spaniel

Imaging Performed By: Stephanie Warga RDCS, RVT.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**SEX**

Spayed Female

Urinary System

The urinary bladder is moderately distended with mild primarily suspended echogenic debris present. 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 calculi. Echogenic debris of this type can be associated with small crystals, cellular debris and proteinaceous debris.

AGE

5/18/2012

The left kidney has a normal shape and size (6.34 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. Mild pyelectasia is present (0.36 cm). There is no evidence of nephroliths, infarcts or hydroureter. Renal vasculature is normal.

WEIGHT

36.8 lbs

The right kidney has a normal shape and size (5.90 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. Mild pyelectasia is present (0.30 cm). There is no evidence of 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 (0.61 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.

HOSPITAL NAME

Chadwell AH

The right adrenal gland is normal in size (0.59 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.

REFERRING VET

Dr. Weeks

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. There are numerous (at least four) hypoechoic nodules visualized within the parenchyma (one measuring 1.49 x 1.84 / another 0.61 x 0.51 cm / another 0.69 cm in diameter / another 0.98 cm in diameter).

INVOICE

13613

Liver

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

The gall bladder lumen is moderately distended. The wall of the gall bladder is not thickened and has a smooth mucosal surface. There is a moderate amount of non-organized echogenic debris. 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 (0.39 cm) and the jejunum measured as normal (0.30 cm) 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, or subjective lymphadenomegaly. The Medial iliac nodes appear normal and there was no evidence of a caudal aortic thrombus at the bifurcation. The omentum is of normal uniform echogenicity.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

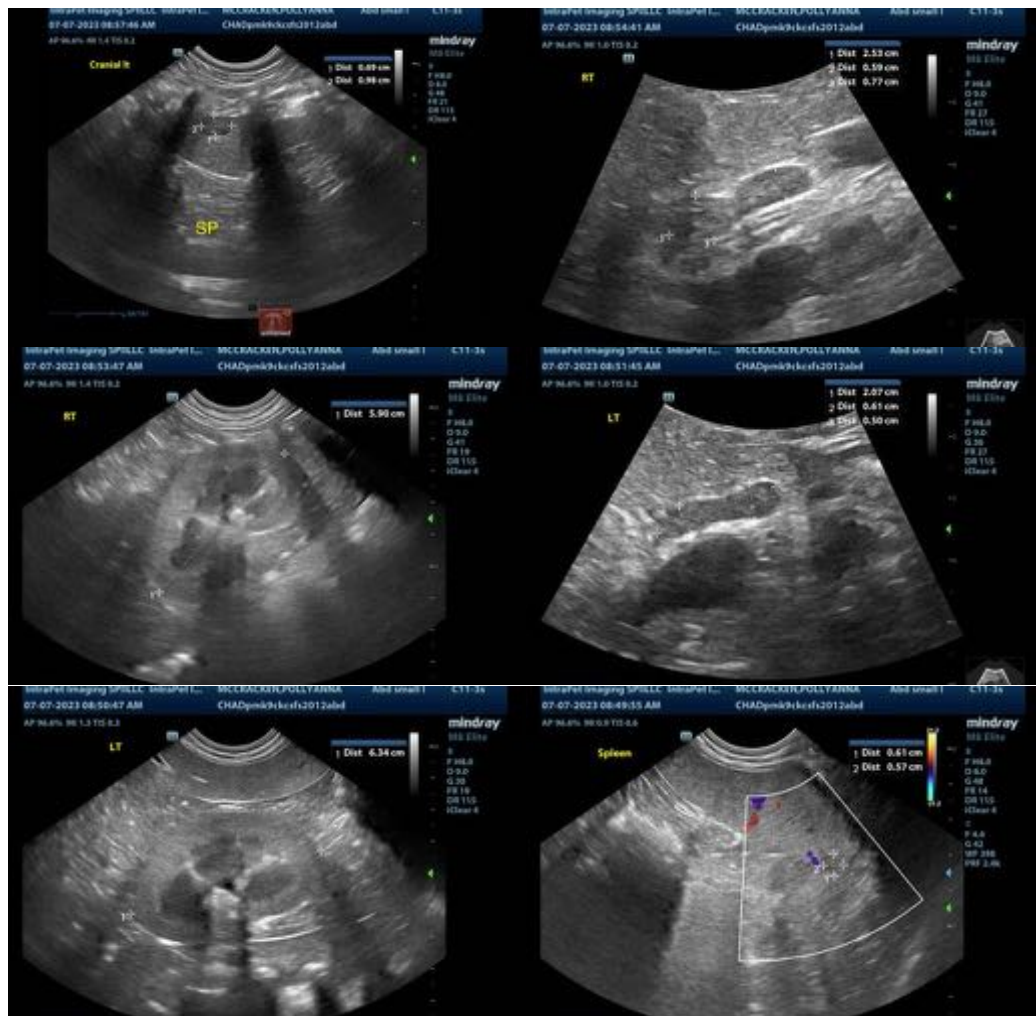
- Dependent echogenic debris in the urinary bladder – The echogenic debris in the bladder lumen could be consistent with cells, crystals, and/or mucus. Recommend urinalysis and culture.
- Bilateral pyelectasia – Pyelectasia of the kidneys could be consistent with pyelonephritis, chronic renal disease, secondary to PU/PD or fluid therapy (if applicable), other. The current Lasix therapy could be contributing to the pyelectasia.
- Multiple hypoechoic splenic nodules - There are several, non-cavitated, hypoechoic splenic nodules visualized. Differentials include lymphoid hyperplasia, extramedullary hematopoiesis, infiltrative neoplasia, inflammation, other. Cytology or histopathology would be necessary to get a definitive diagnosis.
- Heterogenous liver – The diffuse hepatic changes are non-specific and could be consistent with vacuolar hepatopathy, nodular hyperplasia, inflammatory/immune-mediated disease, fibrosis, extramedullary hematopoiesis, toxic hepatopathy (e.g., copper), infiltrative neoplasia (less likely) or other hepatopathy.
- Moderate gall bladder debris - The significance of the aggregated gallbladder debris is unclear. This could represent an early mucocele, cholestasis, or may be secondary to fasting but seems unlikely to be causing a current issue. Recommend continued monitoring.

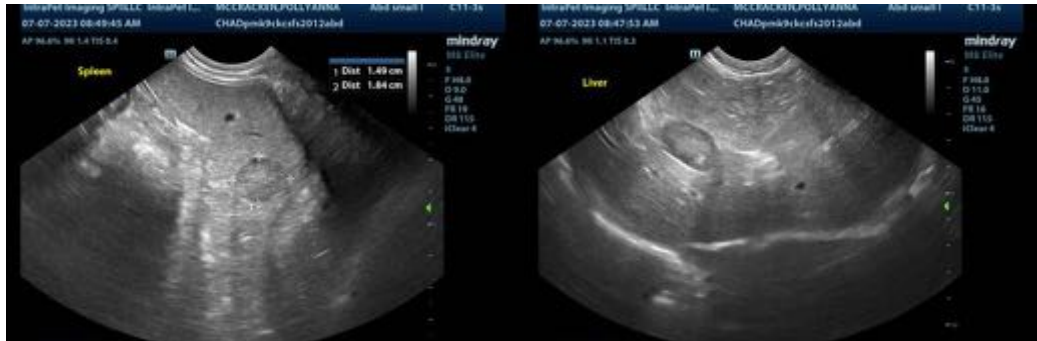
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

There are multiple hypoechoic nodules visualized within the spleen. These could represent benign or neoplastic lesions, although the increased number of lesions is somewhat concerning. Options moving forward would include fine-needle aspirates (it would likely be difficult to sample all lesions), continued monitoring with ultrasound, or a splenectomy for both diagnostic and therapeutic purposes.

The liver is somewhat heterogenous. This is a nonspecific finding. No focal lesions are visualized. Options moving forward would include continued monitoring and/or a fine-needle aspirate, and a liver function test to further evaluate.

There is bilateral renal pyelectasia visualized. This is likely secondary to the Lasix therapy, but with the echogenic debris visualized in the urinary bladder, a urinalysis and culture is 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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