**DATE PRESENTING CLINICAL SIGNS**

8/23/23

Maggie presented for inappropriate urination (accidents in the house). She was treated for a urinary tract infection (few WBCs and rare cocci seen on free catch UA) and no improvement was noted. She is not PU/PD per owners. She has a history of osteoarthritis but is otherwise doing well and the rest of her exam is unremarkable.

PATIENT

Maggie Matzek

SPECIES

Canine

BREED

Cocker Spaniel

SEX

Spayed Female

AGE

10/1/08

WEIGHT

39.5 Pounds

INTERPRETED BY

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

HOSPITAL NAME

Mount Airy Vet
Associates

REFERRING VET

Dr. Cormier

INVOICE

44891

Current Medications: Carprofen 37.5mg BID, Levothyroxine 0.3mg BID
Lab Results: On her last lab work her ALP was mildly elevated, otherwise unremarkable.
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Torbugesic/Midazolam IV.
Stat Report: Not requested.
Imaging Performed By: Stephanie Warga RDCS, RVT.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**Urinary System**

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.

The left kidney has a normal shape and size (6.42 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of focal perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The right kidney has a normal shape and size (6.15 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of focal perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

Adrenal Glands

The left adrenal gland is normal in size measuring 0.57 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.

The right adrenal gland is normal in size/borderline "plump" measuring 0.60 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.

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.

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 significantly distended. Some areas of the wall appear mildly thickened with adherent debris and some areas have early mucosal stranding and organization of the debris into an early mucocele. There is a large amount of primarily non-organized echogenic debris present as well. There is no evidence of bile duct dilation.

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. Duodenum wall measures 0.44 cm. Jejunum wall measures 0.32 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 right limb of the pancreas is prominent and mottled compared to the surrounding isoechoic 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

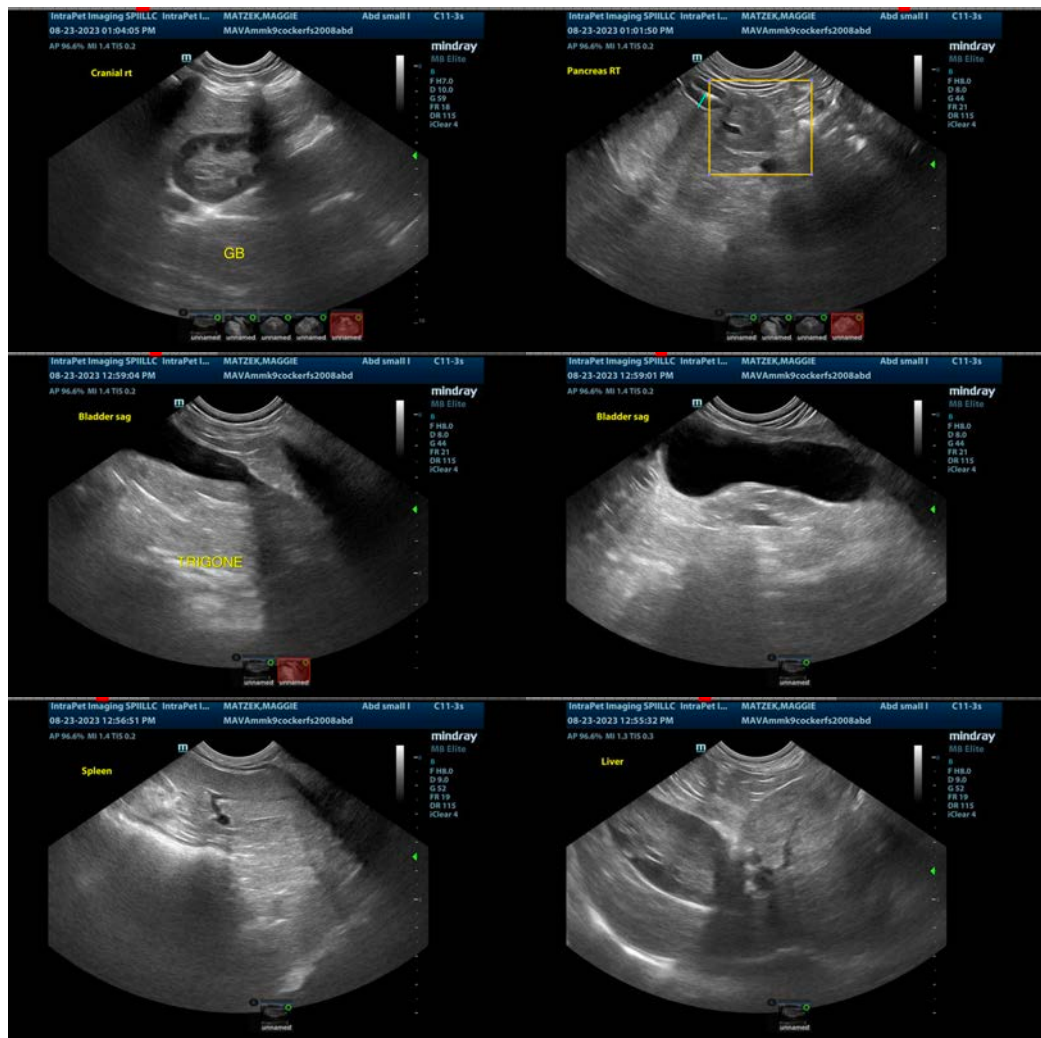
- Prominent, mottled right limb of the pancreas – The pancreatic changes are most consistent with age-related parenchymal remodeling, potentially secondary to a prior inflammatory episode, early fibrosis or chronic pancreatitis.
- Heterogeneous liver – The diffuse hepatic changes are non-specific and 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.
- Slightly prominent gallbladder with a large amount of intraluminal debris and early organization of the intraluminal debris – Findings are most consistent with an early gallbladder mucocele. Gallbladder wall appears normal and there is no surrounding inflammation.

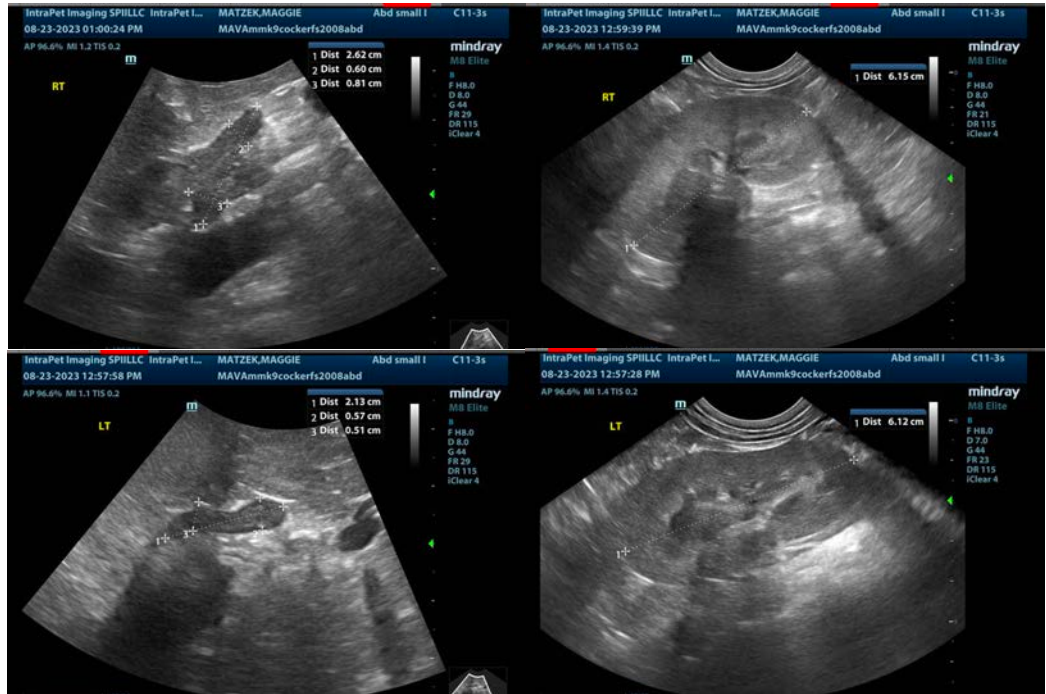
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The urinary bladder appears normal and the proximal urethra appears normal. There is no evidence of a mass lesion, calculi, etc. Unfortunately, the more distal urethra cannot be evaluated with ultrasound due to interference with the pelvic bone. Consider a digital rectal exam to palpate for any obvious urethral

thickening, mass effects, etc. It is unclear if this patient has lower urinary tract signs (pollakiuria, stranguria, etc.). If not, this could potentially be behavioral or due to unperceived PU/PD, but this is unlikely, given the urine specific gravity provided.

The liver appears somewhat heterogeneous with mild elevation in ALP. Options moving forward would include continued monitoring or you could consider a liver function test and a fine needle aspirate. Additionally, these changes could be secondary to mild gallbladder disease. There appears to be early changes to the gallbladder consistent with an early mucocele. Consider chronic Ursodiol therapy and continued monitoring of the gallbladder for progression of this lesion.





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.

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