

**DATE PRESENTING CLINICAL SIGNS**

6/14/22

06-12-2022 Notes: was fine today- owner went out for 3 hours- came back- found him not wanting to get up, lethargic, did not want to eat; had a soft stool bm, did urinate; on the way to car- did vomit history of renal disease, hypertension, arthritis, spinal issues is on enalapril, methocarbamol, gabapentin, adequan not aware of getting into anything no known trauma. On PE slightly dehydrated and tense abdomen.

PATIENT

Milton Gellman

SPECIES

Canine

BREED

Cocker Spaniel X

SEX

Neutered Male

AGE

7/24/06

WEIGHT

24.1 Pounds

INTERPRETED BYBeth Johnson, DVM
DACVIM**IMAGING PERFORMED BY**

Rachel Brilhart RDMS

HOSPITAL NAMEAnimal Emergency
Hospital**REFERRING VET**

Dr. Willer

INVOICE

38695

Current Medications: Omeprazole, Enalapril, Buprenorphine, Entyce, Ampicillin, Maropitant Citrate.
Radiographs: Decreased detail- looks hazy; bright mineralization in the lower lumbar spine region; spondylosis noted.
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**Urinary System**

The urinary bladder is moderately distended with anechoic contents. No masses, inflammatory changes, echogenic sediment or cystoliths are observed. The urinary bladder, trigone and visible pelvic urethra are normal in thickness with a smooth mucosal surface.

Prostate (neutered) is normal in size, echotexture and echogenicity for a neutered male.

The right kidney is normal in size (4.92 cm) and shape with smooth peripheral margination. A normal 1:3 cortex to medulla ratio is maintained. The medulla and cortices are uniform in texture with some mild increased echogenicity and mild loss of corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed.

The left kidney is normal in size (4.46 cm) and shape with smooth peripheral margination. A normal 1:3 cortex to medulla ratio is maintained. The medulla and cortices are uniform in texture with some mild increased echogenicity and mild loss of corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed.

Adrenal Glands

The left adrenal gland is "plump"/swollen in size (2.79 cm long x 1.0 cm at the cranial pole and 1.2 cm at the caudal pole). Normal shape and contour are maintained. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

The right adrenal gland is "plump"/swollen in size (2.27 cm long x (0.73 cm at the cranial pole and 0.79 cm at the caudal pole). Normal shape and contour are maintained. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

Spleen

The spleen is subjectively enlarged in size. Parenchyma contains multifocal poorly defined, hypoechoic nodules of varying sizes that do not disrupt the splenic capsule, as well as a 1.5 cm hyper- to anechoic nodule/mass off of the head of the spleen, which does disrupt the capsule.

Liver

Liver is subjectively enlarged with rounded margins. Parenchyma is heterogenous characterized by multiple poorly defined hypoechoic nodules within otherwise hyperechoic liver parenchyma. Visible vasculature appears normal.

GB contains a moderate amount of non-dependent, mildly aggregated/inspissated sludge. Hypo to anechoic cystic areas are noted between the gallbladder sludge and luminal wall. The wall is otherwise smooth without visible thickening. There is no evidence of cystic or CBD dilation. There is no evidence of effusion.

Gastrointestinal

The stomach wall is normal in thickness (canine < 0.5 cm and feline < 0.4 cm) and layering. The lumen of the stomach is empty with no evidence of obstruction, foreign material or infiltrative disease. Pyloric outflow tract appears patent.

The visible small intestines are normal in wall thickness and layering (canine duodenum < 0.5 cm and feline duodenum < 0.4 cm; other < 0.3 cm). Small intestinal motility appears adequate (1-3 contractions per min). The lumen of the small intestine is empty with no evidence of obstruction, foreign material or infiltrative disease.

The visible colon is normal in wall thickness (< 0.2 cm) and layering. Contents are consistent with normal formed feces and gas.

Pancreas

The pancreas is diffusely prominent in size and mildly irregular in shape with a diffusely coarse echotexture and heterogeneous echogenicity.

Free Abdomen

There is no evidence of peritoneal effusion. There is no apparent lymphadenopathy. No pericardial effusion noted.

PRIMARY FINDINGS

- Heterogenous liver – Differentials for hepatic changes include both benign steroid (vacuolar) hepatopathy or extramedullary hematopoiesis as well as infiltrative round cell or metastatic neoplasia.
- Early mucocele – Cholecystic debris is of unknown clinical significance. It can be seen with biliary stasis from fasting or illness. Cholecystic debris is not necessarily related to hepatobiliary disease. The non-dependent nature of this sludge combined with the cystic areas are suggestive, however, of possible emerging cystic mucosal hyperplasia or early gallbladder mucocele.
- Nodular spleen – differentials include both benign change such as nodular hyperplasia or extramedullary hematopoiesis with a focal hematoma or cyst versus infiltrative neoplasia, which can mimic benign lesions, especially given the focal capsular disrupting nodule.

SECONDARY FINDINGS

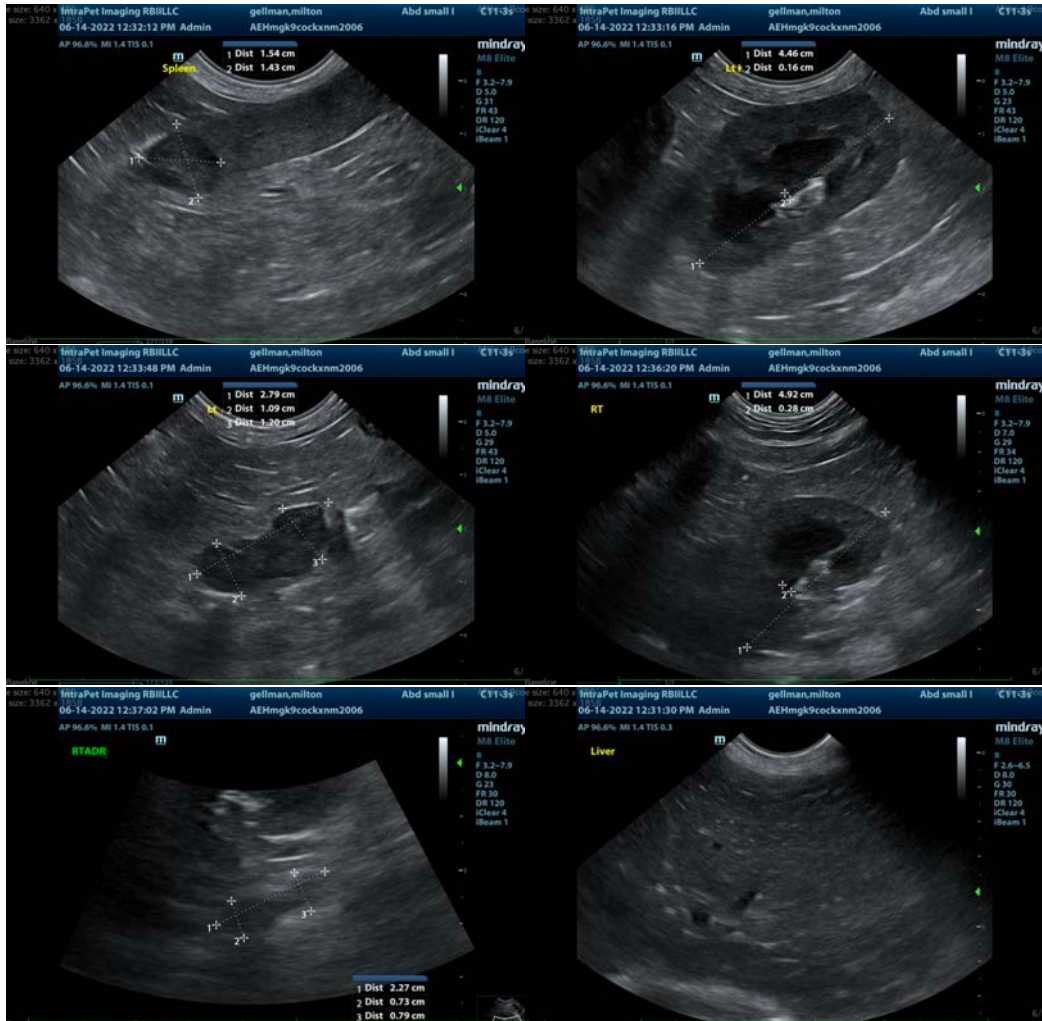
- Age related kidney change – This finding is expected/consistent with age-related mild degenerative disease and should be interpreted clinically in combination with laboratory changes.
- Heterogeneous pancreas – consistent with normal age remodeling.
- Bilateral adrenomegaly – consistent with adrenal hyperplasia secondary to pituitary depending hyperadrenocorticism vs normal variant.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Recommendations include:

- Fine needle aspirate of the liver and spleen, if patient's coagulation status is appropriate.
- CBC/serum chemistry panel with electrolytes and urinalysis, if not recently evaluated.
- Use liver enzyme changes to help further assess the early mucocele's role in this patient's clinical signs. If liver enzyme elevations are consistent in combination with cranial abdominal pain, a cholecystectomy could be considered if the gallbladder changes are deemed the primary contributor to this patient's clinical signs.

Given the history of kidney disease and hypertension combined with the adrenomegaly, another differential for the patient's acute clinical signs is also an acute vascular event, potentially caused by hypertension or secondary to protein losing nephropathy. Therefore, if not rechecked recently, a blood pressure is recommended, as is a urine protein to creatinine ratio, if there is protein in the urine and an otherwise quiet sediment. If coagulation status is appropriate and proteinuria is present, Clopidogrel therapy may be warranted.





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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