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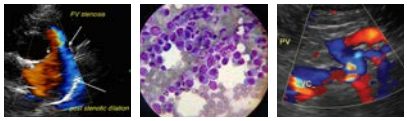

SonoPath

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DATE

2/2/23

PATIENT

Boo Mobley

SPECIES

Canine

BREED

Dachshund

SEX

Neutered Male

AGE

4/20/08

WEIGHT

21.8 Pounds

INTERPRETED BY

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

HOSPITAL NAME

Animal Emergency Hospital

REFERRING VET

Dr. Saubier

INVOICE

44723

PRESENTING CLINICAL SIGNS

Anorexia, lethargy, stomach distended- concern for "bloating"
History of getting large amount of table foods, treats. Grandfathers dog; passed away in December; P is a very picky eater and worried for grieving. O has been trying to entyce P to eat with Ham, turkey hot dog etc.
History: Chronic cough + Left main stem bronchus collapse - chronic bronchitis, Cardiomegaly, Hypercalcemia, Sees internal medicine + Oncology. Current medications: Theophylline + hydrocodone (dosage is not what is on bottle)- Hydrocodone is Q12. Visit on 12/7/22: Bloodwork: Calcium 12; HCT 57.9%, UA: WBC 6-10; Urine culture performed. Abdominal ultrasound: Outcome; Hepatic changes are mild and may be due to aging, fibrosis, steroid hepatopathy, hepatitis, diffuse
neoplasia. Sludge in the gallbladder is likely an incidental finding. Bilateral renal changes would be most consistent with chronic kidney disease/aging. No changes were seen in the lower urinary tract to account for the patient's clinical signs. Initial exam: QAR, lenticular sclerosis, possibly starting with cataracts, Lungs clear, no murmur, tense abdomen.

Current Medications: Theophylline and Hydrocodone.
Lab Results: PCV/TP: 57/5.8 --> 56/8.4. CBC/CHEM/LYTES: WBC 31k, Neu 25k, Monocytosis; Glucose 157, Amylase >2500; Lipase HIGH 5,368 (calcium within normal limits: 11.6).
Radiographs: Lateral and VD abdomen - stomach gas / ingesta dilated, normal position. Fluid throughout small intestines. Repeat radiographs 2/1 ~11am: stomach no longer food filled but is gas filled still-moderate, thickened intestines, obese.
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.
Imaging Performed By: Andi Parkinson, BS, RDMS.

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 prostate is normal in size (0.97 cm) and shape for this neutered male dog. The parenchyma is homogenous and the external margins are smooth. The prostatic urethra appears normal with no evidence of irregularity, invasion, mass effect or calculi.

The left kidney has a normal shape and size (4.91 cm) with occasional small cysts and pinpoint non-obstructive nephroliths. Overall echogenicity is slightly hyperechoic with poor 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 (5.22 cm). Overall echogenicity is slightly hyperechoic with poor 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/borderline “plump” in size measuring 0.89 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/borderline “plump” in size measuring 0.77 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 mildly 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 distended with a moderate to large amount of non-organized echogenic debris present. The wall of the gall bladder is not thickened and has a smooth mucosal surface. The cystic and common bile ducts are normal/not visible.

Gastrointestinal

The stomach is dilated with a large amount of shadowing ingesta /gas. 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 layering is adequate and there is no impression of reduced peristaltic activity. The wall of the pylorus appears somewhat prominent and hypoechoic, measuring at 0.54 cm.

The visualized areas of duodenum, jejunum and ileum have a uniform diameter with minimal fluid distension. Wall appears subjectively, mildly increased. Duodenum wall measures 0.48 cm. Jejunum wall measures 0.31 cm. Bowel loops follow a typical curvilinear path with distinct wall layering. 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 area of 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 appears hyperechoic in the cranial abdomen.

PRIMARY FINDINGS

- Borderline “plump” adrenal glands – The bilateral adrenomegaly could be consistent with bilateral hyperplasia (e.g., secondary to pituitary-dependent hyperadrenocorticism), bilateral infiltrative neoplasia, inflammatory adrenal disease, other. Correlation with clinical findings is recommended.

- 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.

- Moderate to large gallbladder debris – A large amount of debris is evident in the gall bladder with no evidence of a mucocele or associated inflammation at this time. This could represent an early mucocele or cholestasis, with minimal evidence of associated inflammation at this time. Continued monitoring of labwork and ultrasound are warranted for progression of this lesion. Ursodiol therapy could be considered.

- Mildly thickened small intestine – The mild small intestinal wall changes may be a normal variant in this patient or could be consistent with an inflammatory process (e.g., inflammatory bowel disease).

- Prominent/thickened pyloric wall – The stomach wall thickening could be consistent with inflammation, edema, infiltrative neoplasia, imaging artifact due to rugal folds, other.

- Moderate shadowing ingesta/gas within the gastric lumen – Correlate with the feeding history and abdominal radiographs. If the patient was adequately fasted consider such differentials as delayed gastric emptying, a partial outflow tract obstruction (none seen) or ingested foreign material.

SECONDARY FINDINGS

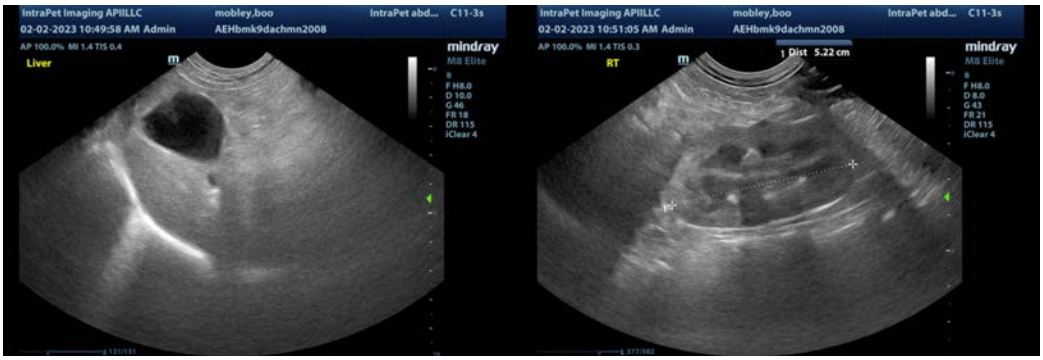
- Decreased corticomedullary distinction in both kidneys with small left-sided cortical cysts and pinpoint non-obstructive nephroliths – The bilateral renal findings are consistent with age-related change.

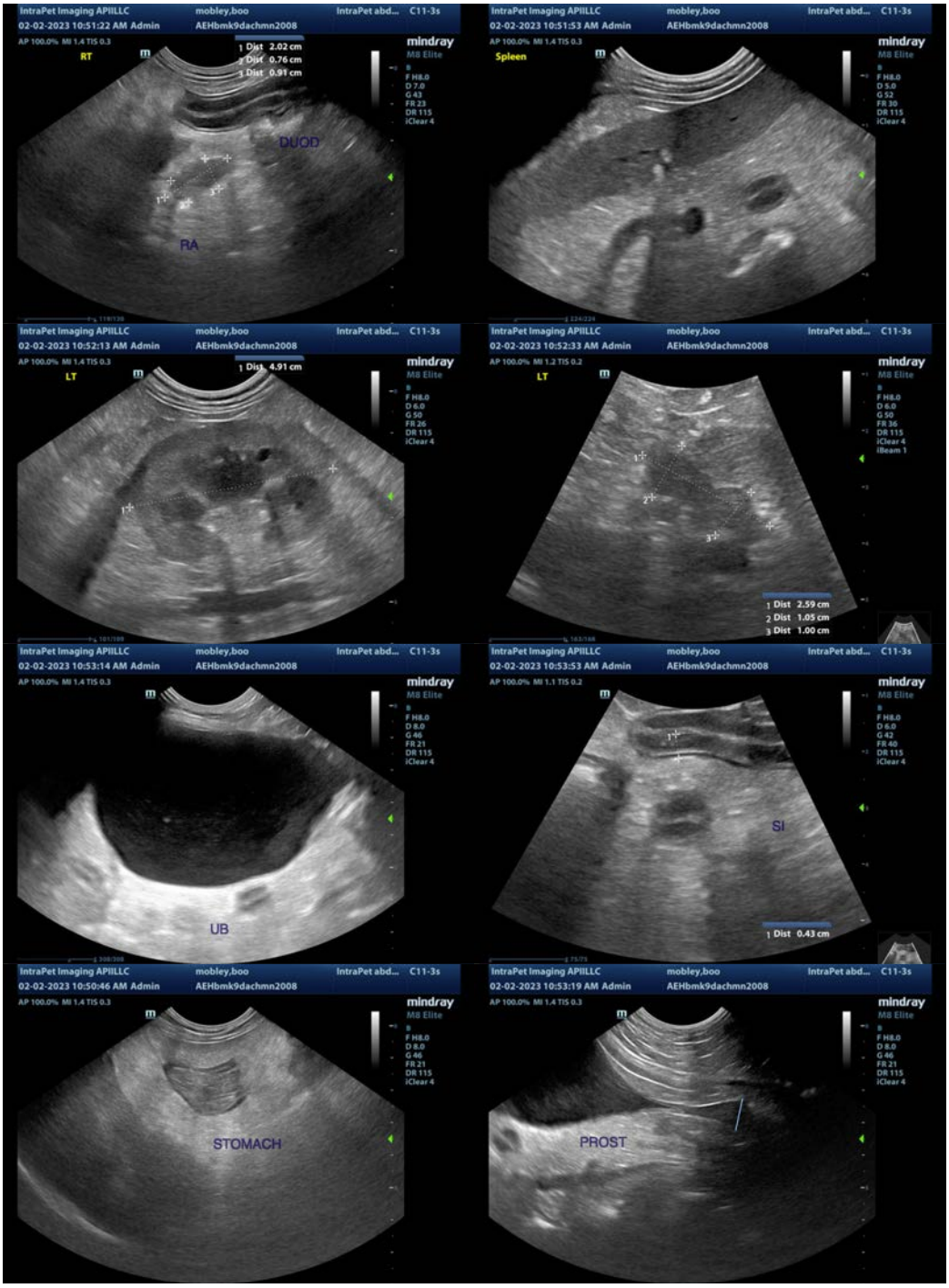
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

There is the general impression of hyperechoic mesentery in the cranial abdomen and inflammation. I do not see evidence of an overtly inflamed pancreas, but there is a possibility that shadowing from gastric contents could interfere with this. Correlate findings with a quantitative cPLI measurement. Additionally, the pylorus appears somewhat prominent and possibly mildly thickened. This could be normal for this individual, or may represent irritation, gastritis, less likely neoplastic change. Recommend continued monitoring.

The remaining changes observed are likely chronic and stable in this older pet, including the mildly heterogeneous liver, gallbladder debris, and subjective bowel thickening. You could consider Ursodiol therapy for the gallbladder with continued monitoring to make sure this does not progress to a surgical lesion.

For now, recommend treatment for acute gastroenteritis/pancreatitis. If the patient is not feeling better, consider reevaluation of the pancreatic region and the stomach.

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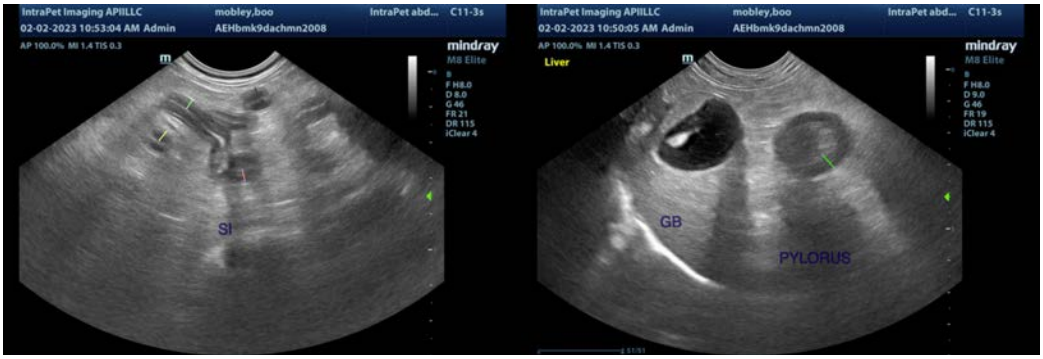

The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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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