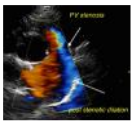
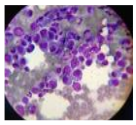
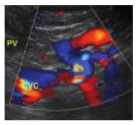




DATE
3/8/23

PATIENT
Charlie Airing

SPECIES
Canine

BREED
Pug Mix

SEX
MN

AGE
8/7/2007

WEIGHT
16.4 lbs.

INTERPRETED BY
Beth Johnson, DVM DACVIM

HOSPITAL NAME
Airpark AH

REFERRING VET
Dr. Ridinger.

INVOICE
16316

PRESENTING CLINICAL SIGNS

Vomiting x 9 over past 3 days - history of seizures starting about 2 years ago, becoming more frequent; recently and started keppra 250 mg PO TID in January, then had break through seizures so increased dose to 1.5 tab keppra am/pm with just 1 tab at midday - no seizures since increase nothing he could have gotten into, history of hepatitis and currently taking ursodiol daily

Current Medications: cerenia 16mg PO QD, Clavamox 125mg PO BID, Keppra 250mg 1.5 tab am, 1 tab midday, 1.5 tab pm, Ursodiol - unsure of dose, Denamarin 225mg - just restarted, Welactin, Solliquin as needed
Bravecto q 90 days
Lab Results: normocytic normochromic nonregenerative anemia (chronic disease), mild elevated BUN, ALT=276, ALKP=317
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.
Imaging Performed By: Rachel Brilhart, RDMS.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder is adequately distended with anechoic contents. No masses or inflammatory changes are observed. The urinary bladder, trigone and visible pelvic urethra are normal in thickness with a smooth mucosal surface. A 0.2 cm cystolith is noted.

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

Kidneys are overall normal in size 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 cortical echogenicity and mild loss of corticomedullary distinction, expected in this age patient. There is no evidence of pyelectasia or infarcts observed. Non-obstructive areas of mineralization/nephroliths are noted bilaterally.

Adrenal Glands

The right adrenal gland is normal in size (1.52 cm length x 0.72 cm width at the cranial pole and 0.66 cm width at the caudal pole), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

The left adrenal gland is normal in size (2.04 cm length x 0.65 cm width at the cranial pole and 0.57 cm width at the caudal pole), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

Spleen

The spleen is subjectively normal in size with a normal smooth capsular contour. Parenchyma is appropriately finely textured and homogenous with normal echogenicity relative to surrounding tissue (hyperechoic to liver). No focal nodules or masses are observed. Splenic vasculature appears normal.

Liver

Liver is subjectively enlarged with mildly irregular margins. Parenchyma is heterogenous characterized by multiple poorly defined hypoechoic nodules within otherwise hyperechoic liver parenchyma. Visible vasculature and biliary tree appear normal without distension or congestion.

Gallbladder is moderately distended with anechoic bile as well as suspended and gravity dependent, moderate echogenic debris. The wall is smooth without visible thickening. There is no evidence of cystic or CBD dilation. There is no evidence of effusion or inflammation.

Gastrointestinal

The stomach is diffusely mildly thick raging between 0.6 - 0.9 cm thick. Layering is visible but subtle with some loss of detail noted. The stomach is mildly distended with echogenic non-shadowing luminal contents and gas consistent with normal ingesta. There is no evidence of obstruction or foreign material noted.

The visible small intestines are normal in wall thickness and layering. Hyperechoic mucosal fogging or speckling is noted. Small intestinal motility appears adequate (1-3 contractions per min). The lumen of the small intestine is mildly distended with echogenic non-shadowing luminal contents and gas consistent with normal ingesta. There is no evidence of obstruction or foreign material noted.

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

Pancreas

Pancreas is prominent (enlarged) in size and mildly irregular in shape with a slightly undulating contour. Parenchyma is coarse in echotexture and heterogenous to hypoechoic in echogenicity.

Free Abdomen

There is no evidence of free peritoneal effusion noted in these images.
There is no apparent lymphadenopathy noted in these images.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- Heterogenous Liver – These changes are most consistent with benign processes such as nodular hyperplasia, steroid (vacuolar) hepatopathy, extramedullary hematopoiesis or possibly chronic inflammatory disease and less commonly infiltrative round cell or metastatic neoplasia.

- Moderate gallbladder debris - 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. Echogenic bile is most commonly an incidental finding in dogs and should be interpreted in combination with clinical signs such as nausea, inappetence, cranial abdominal discomfort and/or laboratory changes such as increased ALP and/or increased Tbili.

- Mucosal speckling – Mucosal speckling is often present with inflammatory bowel disease (IBD). It is not specific for type or severity of disease. Mild speckling change can occur as a normal patient variant in the post-prandial state.

- Diffusely thick gastric wall concerning for an infiltrative either benign, inflammatory, parasitic, or infectious etiology, although infiltrative neoplasia is possible and cannot be ruled out without tissue sampling.

- Chronic active pancreatitis - Acute on chronic smoldering flair-up cannot be definitively ruled out.

Secondary Findings

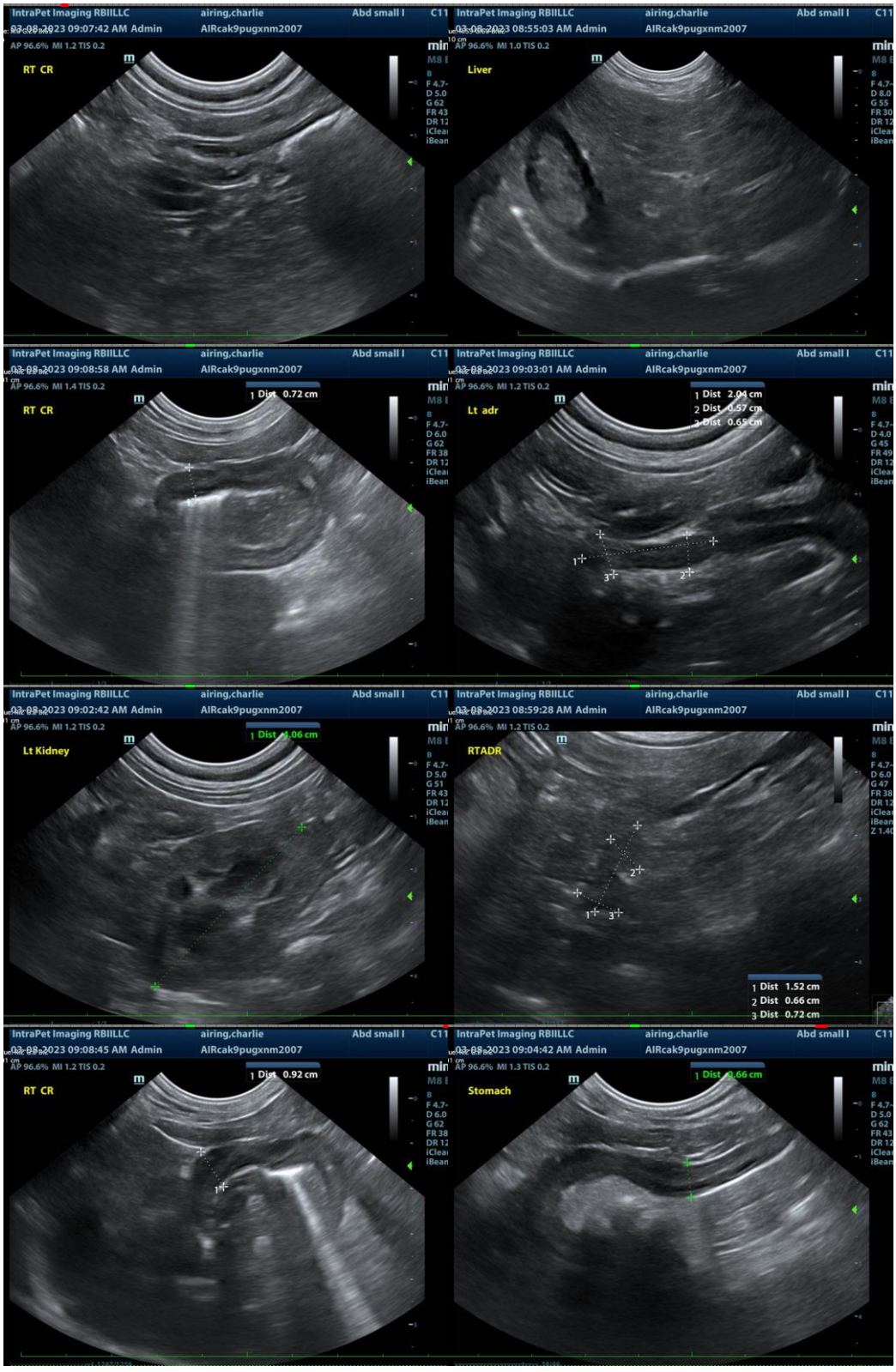
- A small cystolith is noted.

- Age-related kidney changes with small nonobstructive nephroliths bilaterally.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

1. Given the pancreas and bowel changes, a gastrointestinal malabsorption panel (including cobalamin, folate, TLI and PLI) to Texas A&M GI Laboratory is recommended for further evaluation of GI and pancreatic function.

Beyond that, recommendations are dependent on the level of aggressiveness elected by patient owners and attending clinicians with a conservative approach being to manage a possible acute on chronic pancreatitis or gastroenteritis flair-up with antiemetics, gastroprotectants, appetite stimulants, nutritional support as-needed, pain management if indicated, and fluid therapy if necessary, etc., and then recheck imaging of the pancreas and stomach vs. a more aggressive recommendation which would include either a fine needle aspirate of the gastric wall if the patient's coagulation status is appropriate, or upper GI gastroscopy / endoscopy for further visual evaluation, as well as biopsies of the stomach and small bowel. Additionally, if not recently evaluated, urinalysis and, if indicated based on urinalysis results, urine culture are recommended. If protein is present in an otherwise quiet sediment, protein quantification with a urine protein to creatinine ratio is recommended.


IntraPet Imaging RBIILLC
airing,charlie
Abd small I
C11
AIRcak9pugxnm2007
AP 96.6% MI 1.2 TIS 0.2
RT CR
IntraPet Imaging RBIILLC
airing,charlie
Abd small I
C11
AIRcak9pugxnm2007
AP 96.6% MI 1.0 TIS 0.2
Liver
IntraPet Imaging RBIILLC
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Abd small I
C11
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AP 96.6% MI 1.4 TIS 0.2
1 Dist 0.72 cm
RT CR
IntraPet Imaging RBIILLC
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Abd small I
C11
AIRcak9pugxnm2007
AP 96.6% MI 1.2 TIS 0.2
1 Dist 2.04 cm
2 Dist 0.57 cm
3 Dist 0.65 cm
Lt adr
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Abd small I
C11
AIRcak9pugxnm2007
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Lt Kidney
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C11
AIRcak9pugxnm2007
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RTADR
1 Dist 1.52 cm
2 Dist 0.66 cm
3 Dist 0.72 cm
IntraPet Imaging RBIILLC
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Abd small I
C11
AIRcak9pugxnm2007
AP 96.6% MI 1.2 TIS 0.2
1 Dist 0.92 cm
RT CR
IntraPet Imaging RBIILLC
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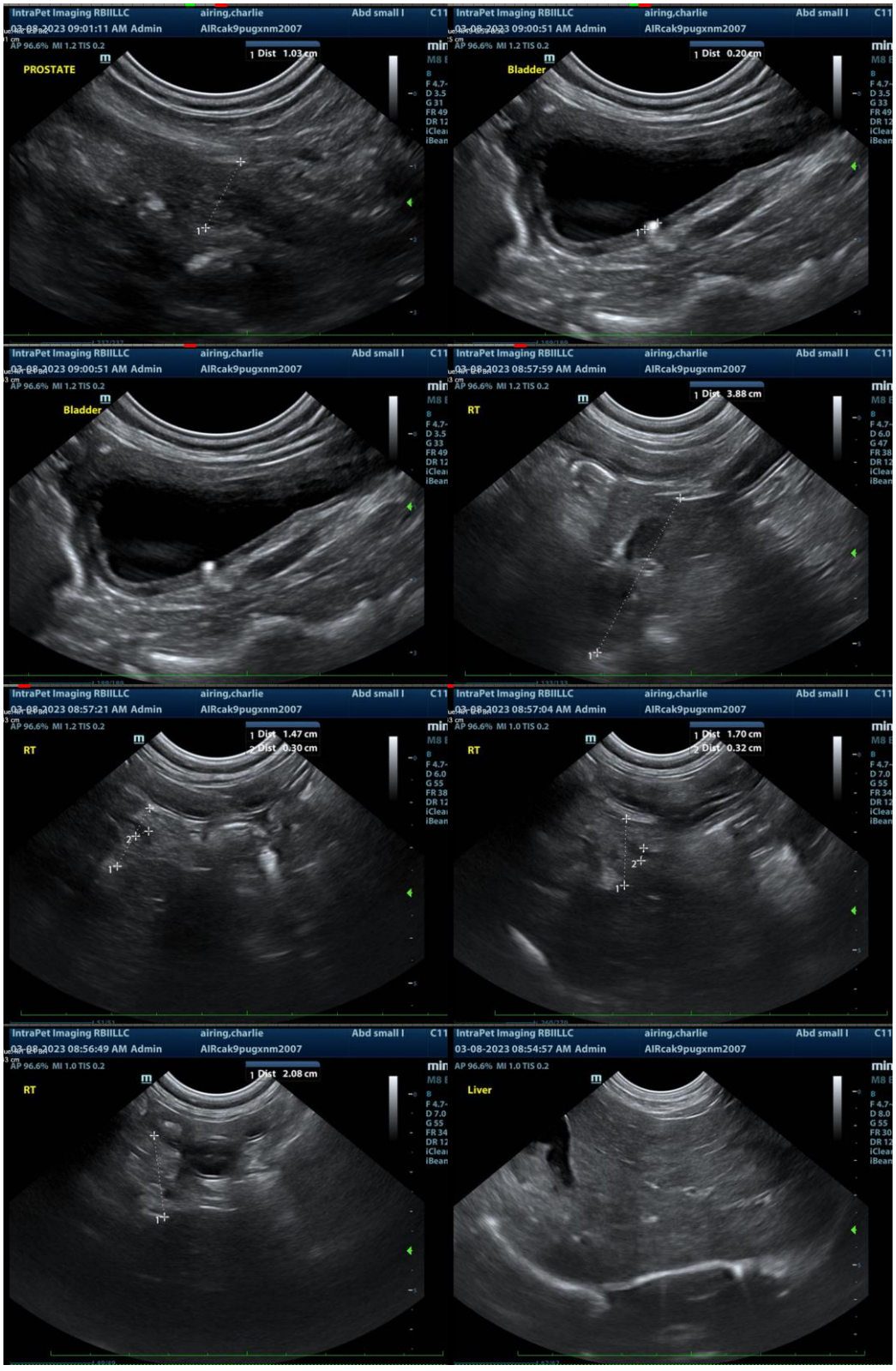
C11
AIRcak9pugxnm2007
AP 96.6% MI 1.3 TIS 0.2
1 Dist 0.66 cm
Stomach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PROSTATE
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Abd small I
C11
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Bladder
IntraPet Imaging RBIILLC
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Abd small I
C11
03-08-2023 09:00:51 AM Admin
AIRcak9pugxnm2007
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Bladder
IntraPet Imaging RBIILLC
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Abd small I
C11
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Abd small I
C11
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Abd small I
C11
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Abd small I
C11
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AP 96.6% MI 1.0 TIS 0.2
Liver

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.

Beth Johnson, DVM, DACVIM
Beth.Johnson@sonopath.com