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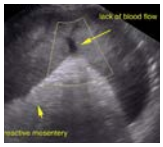
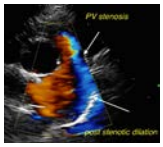
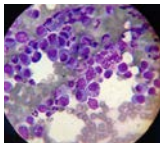
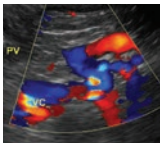

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1-800-838-4268 info@sonopath.com

PATIENT
Bailey Challenger

SPECIES
Canine

BREED
Hound X

SEX
Spayed Female

AGE
3 Years

WEIGHT
22.8 kg

INTERPRETED BY
Beth Johnson, DVM DACVIM

IMAGING PERFORMED BY
Erin Wicks

HOSPITAL NAME
Shores VEC

REFERRING VET
Dr. Welti

INVOICE
44737

DATE
2/3/23

PRESENTING CLINICAL SIGNS

Presented at our hospital for weight loss and PU/PD since December , not eating well to at all for over 1 week, lethargy and regurgitation since yesterday and regurgitated 15-20 times a day. Went to rDVM yesterday and bloodwork showed DKA Previous Health Concerns: allergies Current Medications: apoquel and cytopoint injections

Abnormal PE/Chem/CBC/UA Results: rads- rDVM- no obvious fb/ obstructions Chem(2/1/23)- rDVM- Alp 149(H) glucose 309(H) K+3.5(L) ; CBC Rdvm- NSF; UA(inhouse rDVM) (+) ketones SVEC- EPOC- pH 7.2(L) Na+ 135(L) K+ 2.6 (L) iCa (1.11) (L) glucose 455(H)

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

Urinary bladder is only mildly distended (empty). Visible contents are anechoic. Urinary bladder wall is unable to be fully assessed for pathology without further distension. No visible masses or cystoliths are observed. The trigone and visible pelvic urethra are normal thickness with a smooth mucosal surface. If there are urinary signs and/or concern for urinary bladder pathology, reassessment after complete filling is recommended.

The right kidney is normal in size (8.53 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed. A hyperechoic band parallel to the corticomedullary border is present.

The left kidney is normal in size (7.28 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed. A hyperechoic band parallel to the corticomedullary border is present.

Adrenal Glands

The area of the right adrenal gland is examined without evident adrenal gland pathology.

The left adrenal gland is normal in size (2.43 cm long x 0.43 cm at the cranial pole and 0.53 cm 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 (swollen contour) without disruption of architecture. It has a normal homogenous echotexture. Parenchyma is diffusely hyperechoic characterized by less prominent than normal portal vein walls and increased echogenicity relative to the spleen and falciform fat. No focal lesions are observed. Visible vasculature and biliary tree appear normal without distension or congestion.

The gallbladder is non-distended in size. The wall is smooth without visible thickening. Luminal contents are primarily anechoic. There is no evidence of cystic or common bile duct dilation.

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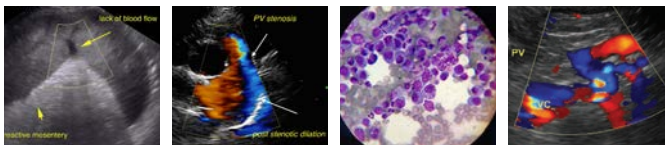

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Gastrointestinal

The stomach wall is normal in thickness (canine < 0.5 cm and feline < 0.4 cm) and layering. The lumen of the stomach is mildly to moderately fluid distended 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 pancreatic parenchyma is appropriately isoechoic to surrounding tissue. Visible capsule is smooth and normal in contour. There is no visible pancreatic duct dilation. There is no evidence of active peripancreatic inflammation.

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

- **Bilateral medullary rim sign -** This finding is of unknown clinical significance and can be a normal variant, often idiopathic. Medullary rim sign can be present with renal disease including FIP, lymphoma, hypercalcemic nephropathy, Leptospirosis, tubular disease, other and should be interpreted in combination with other more specific indications of kidney disease such as isosthenuria, proteinuria, azotemia, etc. This is a common incidental finding in patients with diabetes mellitus.

- **Hyperechoic hepatomegaly -** This appearance is non-specific and most consistent with a benign steroid (endocrine) or vacuolar hepatopathy or reactive or idiopathic hepatopathy. Inflammatory and/or infiltrative disease (such as round cell neoplasia) are also possible, but considered less likely.

- **Mild to moderate gastric stasis/ileus –** likely secondary to this patient's underlying metabolic disease, with no evidence of infiltrative disease, foreign material, or overt obstruction.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

This patient's kidney and liver changes are both likely secondary to the newly diagnosed diabetes. Recommendations include aggressive supportive/symptomatic medical management of dehydration and gastrointestinal signs, etc. combined with electrolyte therapy and monitoring as needed, and short-acting frequent insulin administration with monitoring of blood glucoses and ketones to direct therapy, followed by transition to a longer-acting insulin upon resolution of the ketonuria and improvement in appetite.

If gastrointestinal signs, especially the regurgitation persist beyond patient stabilization and regulation of metabolic derangements, recheck imaging should be considered.

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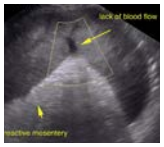
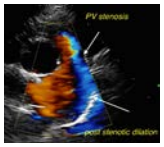
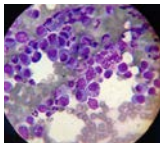
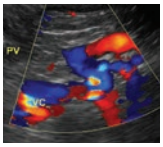

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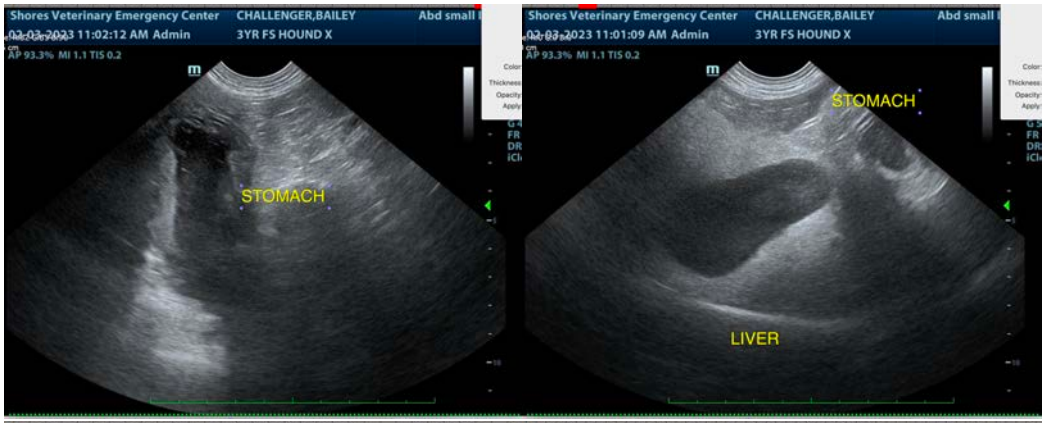

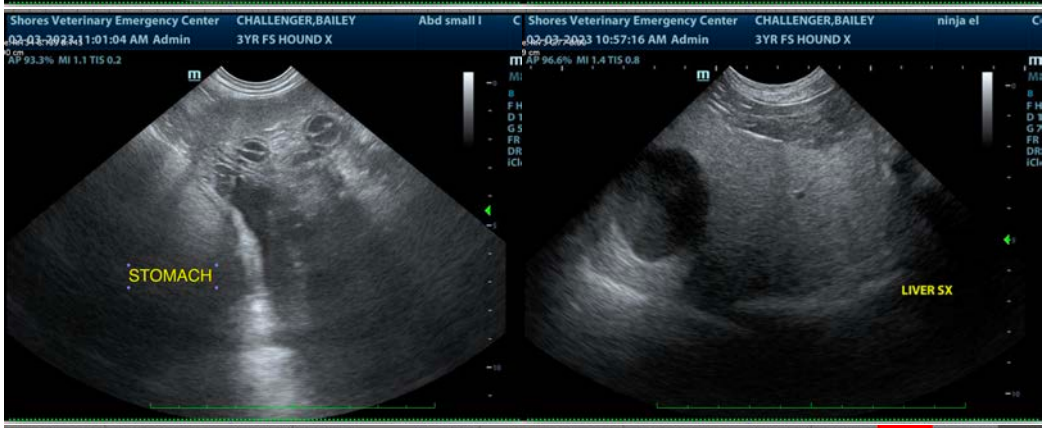

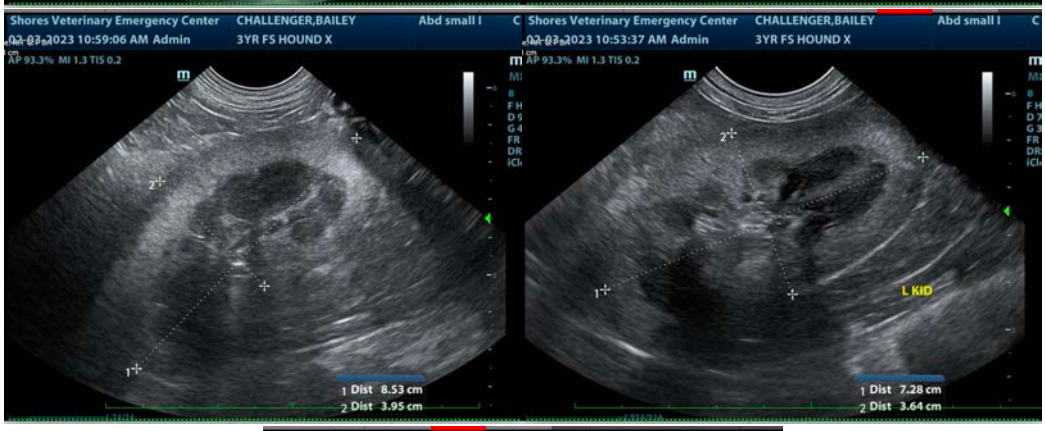

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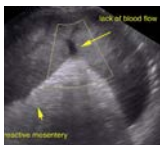
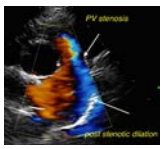
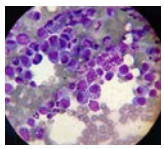
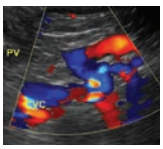

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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

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