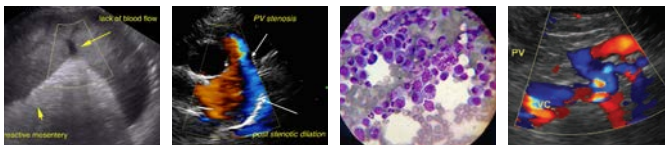
SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™



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

PATIENT
Maddie Acheson

SPECIES
Canine

BREED
Chihuahua X

SEX
Spayed Female

AGE
5 Years

WEIGHT
12.13

INTERPRETED BY
Beth Johnson, DVM DACVIM

IMAGING PERFORMED BY
Dr. Jacquie Preston

HOSPITAL NAME
All Creatures AH

REFERRING VET
Dr. Jacquie Preston

INVOICE
44334

DATE
1/18/23

PRESENTING CLINICAL SIGNS

P has chronic >6months history of reoccurring GI disease including diarrhea +/- hematochezia and melena with anorexia and vomiting, occasionally with frank blood present. P generally responds to metronidazole, but diarrhea reoccurs when off medication. IH lab work shows elevated ALT (403) and elevated ALP (490), otherwise unremarkable with negative fecal. O has been reluctant to start food trials.

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.

The right kidney is unable to be well visualized in these images.

The left kidney is normal in size (3.8 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.

Adrenal Glands

Adrenal glands are small (flattened contour). Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal. The left adrenal gland measures 0.28 cm at the cranial pole and 0.50 cm at the caudal pole. The right adrenal gland measures 0.26 cm at the cranial pole and 0.29 cm at the caudal pole.

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

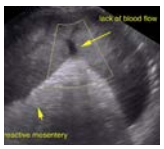
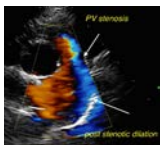
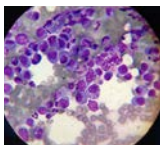
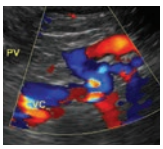
The liver is subjectively normal in size with normal smooth curvilinear peripheral contour. Parenchyma is appropriately hypoechoic to the spleen in echogenicity and appropriately mildly coarse and homogenous in echotexture. No focal lesions are observed. Visible vasculature and biliary tree appear normal 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.

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.

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

PATIENT

Maddie Acheson

SPECIES

Canine

BREED

Chihuahua X

SEX

Spayed Female

AGE

5 Years

WEIGHT

12.13

INTERPRETED BY

Beth Johnson, DVM DACVIM

IMAGING PERFORMED BY

Dr. Jacquie Preston

HOSPITAL NAME

All Creatures AH

REFERRING VET

Dr. Jacquie Preston

INVOICE

44334

DATE

1/18/23

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

- **Flat adrenal glands** – This can be a normal patient variant and/or a sign of exogenous cortisol administration. If exogenous steroids are not being administered, hypoadrenocorticism (either relative or absolute) should be considered.

- An obvious cause for the reported increased liver enzymes is not identified in these images. Microscopic disease such as Leptospirosis, bacterial cholangiohepatitis, chronic active hepatitis, copper-associated hepatotoxicity, other hepatotoxicity, infiltrative neoplasia (considered unlikely), etc. cannot be definitively ruled out.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Given this patient's chronic intermittent gastrointestinal signs, first recommendations include:

A baseline cortisol is recommended. If baseline cortisol is less than 2, a full ACTH stimulation test is recommended to rule out hypoadrenocorticism.

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.

A fecal enteropathogen PCR panel to Texas A&M GI Laboratory could be considered for further evaluation of possible infectious disease.

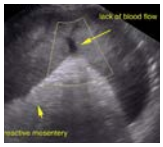
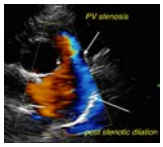
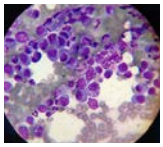
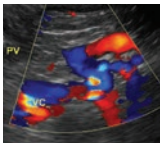
Additionally, given the increased liver enzymes, which certainly could be secondary to underlying gastrointestinal disease, bacterial translocation, etc., testing for Leptospirosis could also be considered.

In the meantime, while awaiting results, empirical deworming with a 5-day course of Panacur is recommended, as is a probiotic such as Visbiome or Proviable, antacid therapy including sucralfate, as well as transition in diet based on trial and error response, beginning potentially with a hydrolyzed protein diet.

Given this patient's repeated improvement with antibiotics such as Metronidazole, and pending results of the fecal PCR panel, a longer course of potentially safer long-term use antibiotic (i.e., Tylosin) could be considered to address potentially "antibiotic responsive diarrhea". If this becomes a perpetual problem, ultimately fecal transplant could potentially be helpful.

Pending diagnostic results and patient response, future recommendations may include upper and lower gastroscopy, endoscopy/colonoscopy for further evaluation and biopsies of the gastrointestinal tract.

SonoPath
Clinical Sonography & Telecytology

EDUCATIONAL TELECONSULTATION SERVICES™

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

PATIENT

Maddie Acheson

SPECIES

Canine

BREED

Chihuahua X

SEX

Spayed Female

AGE

5 Years

WEIGHT

12.13

INTERPRETED BY

Beth Johnson, DVM
DACVIM

IMAGING PERFORMED BY

Dr. Jacquie Preston

HOSPITAL NAME

All Creatures AH

REFERRING VET

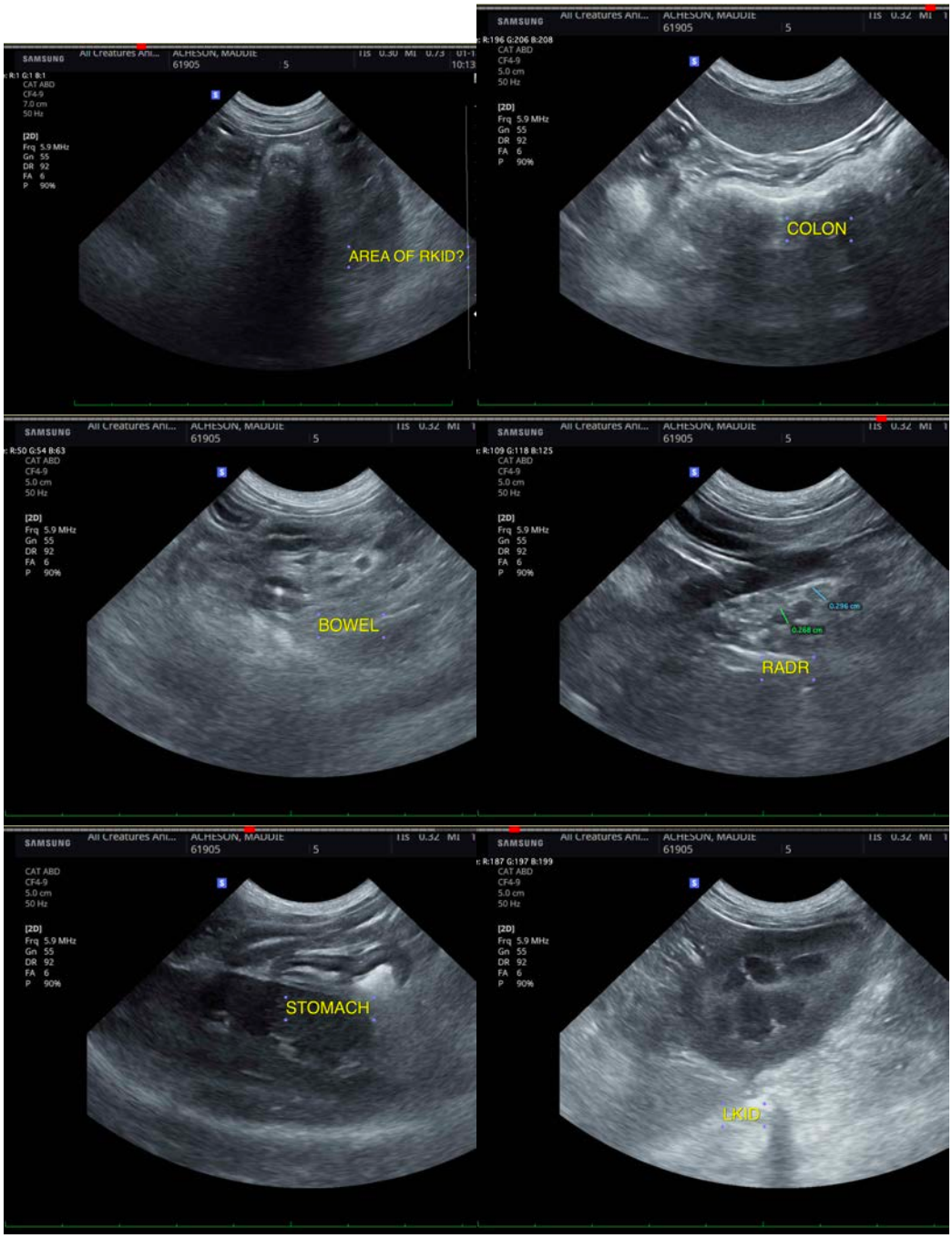
Dr. Jacquie Preston

INVOICE

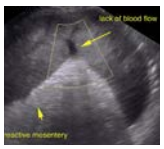
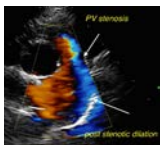
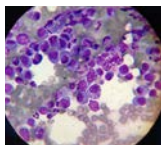
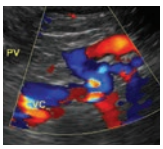
44334

DATE

1/18/23



SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™

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

PATIENT

Maddie Acheson

SPECIES

Canine

BREED

Chihuahua X

SEX

Spayed Female

AGE

5 Years

WEIGHT

12.13

INTERPRETED BY

Beth Johnson, DVM
DACVIM

IMAGING PERFORMED BY

Dr. Jacquie Preston

HOSPITAL NAME

All Creatures AH

REFERRING VET

Dr. Jacquie Preston

INVOICE

44334

DATE

1/18/23

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