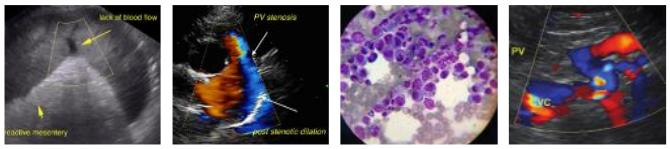
SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™



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

PATIENT

Jax Martell

SPECIES

Feline

BREED

Pixie-Bob

SEX

Neutered Male

AGE

10 Years

WEIGHT

3.4 kg

INTERPRETED BY

Beth Johnson, DVM DACVIM

IMAGING PERFORMED BY

Elyse Hauer

HOSPITAL NAME

Mariposa VH

REFERRING VET

Elyse Hauer

INVOICE

23314

DATE

7/10/23

PRESENTING CLINICAL SIGNS

History: Progress weight loss over the last year and a half, low appetite, occasional diarrhea but only when diet is changed. Collected a small amount of abdominal effusion to send for cytology.

Abnormal PE/Chem/CBC/UA Results: CBC/Biochem/T4 normal. FIV/FELV negative. U/A last September was normal

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

Urinary bladder is adequately 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.

Left kidney is normal in size (3.92 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.

Right kidney is normal in size (4.01 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

Left adrenal gland is normal in size (0.28 cm), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

Right adrenal gland is normal in size (0.36 cm at cranial pole and 0.28 cm at caudal pole), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

Spleen

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

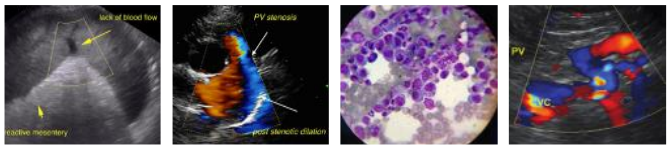
Liver is subjectively normal in size with normal smooth curvilinear peripheral contour. Parenchyma is appropriately hypoechoic to the spleen in echogenicity and appropriately mildly coarse and homogenous in echotexture. No focal lesions are observed. Visible vasculature and biliary tree appear normal without distension or congestion.

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 visible stomach wall is normal in thickness 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 intestine demonstrates areas of thick muscularis layer relative to mucosa (disruption of the normal 1:3 muscularis:mucosa ratio). Small intestinal submucosa is slightly irregular, thick and



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

PATIENT

Jax Martell

SPECIES

Feline

BREED

Pixie-Bob

SEX

Neutered Male

AGE

10 Years

WEIGHT

3.4 kg

INTERPRETED BY

Beth Johnson, DVM DACVIM

IMAGING PERFORMED BY

Elyse Hauer

HOSPITAL NAME

Mariposa VH

REFERRING VET

Elyse Hauer

INVOICE

23314

DATE

7/10/23

hyperechoic. In the caudal abdomen, there is one loop of bowel that appears to have loss of mural detail, characterized by heterogenous hyperechoic nodule in the place of normal bowel wall. This finding, however, is not corroborated in any additional views and could be artifact, potentially some clumped mesentery and just the way that it is being imaged in the one particular video that looks like loss of mural detail. Additionally, subtle hyperechoic mucosal fogging or speckling is noted diffusely. The lumen of the small intestine is empty with no evidence of obstruction or foreign material.

The visible colon is normal in wall thickness and layering. Contents are consistent with normal formed feces and gas.

Pancreas

The observed pancreas appears appropriately isoechoic to surrounding omental fat. Visible capsule is smooth and normal in contour. Visible pancreatic parenchyma is homogenous and unremarkable. There is no visible pancreatic duct dilation. There is no evidence of active peripancreatic inflammation.

Free Abdomen

There is a moderate to large amount of anechoic free fluid throughout the abdomen. The mesenteric lymph nodes are prominent in size with swollen capsular contour. Normal elongated shape (length to width ratio) is maintained. There is no loss of parenchymal detail.

ULTRASONOGRAPHIC FINDINGS

- Inflammatory bowel disease (IBD) pattern – Thick muscularis has been reported with infiltrative bowel disease including both benign inflammatory disease as well as infiltrative neoplasia such as lymphoma. In the caudal abdomen, there is one loop of bowel that is concerning for some early or emerging loss of layering, which is a criteria of malignancy, however, this finding is not corroborated in all of the views and is not a definitive change. Additionally, mucosal speckling is noted- 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.

- Reactive mesenteric lymphadenopathy- infiltrative neoplastic disease cannot be ruled out but is considered less likely.

- A large amount of free abdominal fluid could be a paraneoplastic change or could be secondary to decreased venous return, increased arterial pressure, potentially secondary to cardiac disease vs vasculitis, etc.

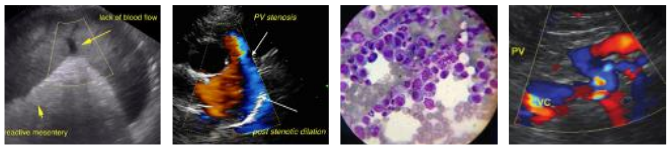
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

As is reportedly already pending, cytology of the free abdominal fluid is recommended. Additionally, especially if physical exam supports further evaluation, thoracic radiographs +/- an echocardiogram could be considered pending fluid cytology results.

Beyond that, 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.

Ideally, biopsies of the GI tract, being sure to include ileum if possible, are recommended to definitively diagnose and therefore manage the infiltrative bowel disease.

If biopsies cannot be obtained, empirical therapies could include a probiotic (if diarrhea is present, such as Visbiome or Proviable), empirical deworming with a 5-day course of Panacur and, if tolerated, a



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

PATIENT

Jax Martell

SPECIES

Feline

BREED

Pixie-Bob

SEX

Neutered Male

AGE

10 Years

WEIGHT

3.4 kg

INTERPRETED BY

Beth Johnson, DVM DACVIM

IMAGING PERFORMED BY

Elyse Hauer

HOSPITAL NAME

Mariposa VH

REFERRING VET

Elyse Hauer

INVOICE

23314

DATE

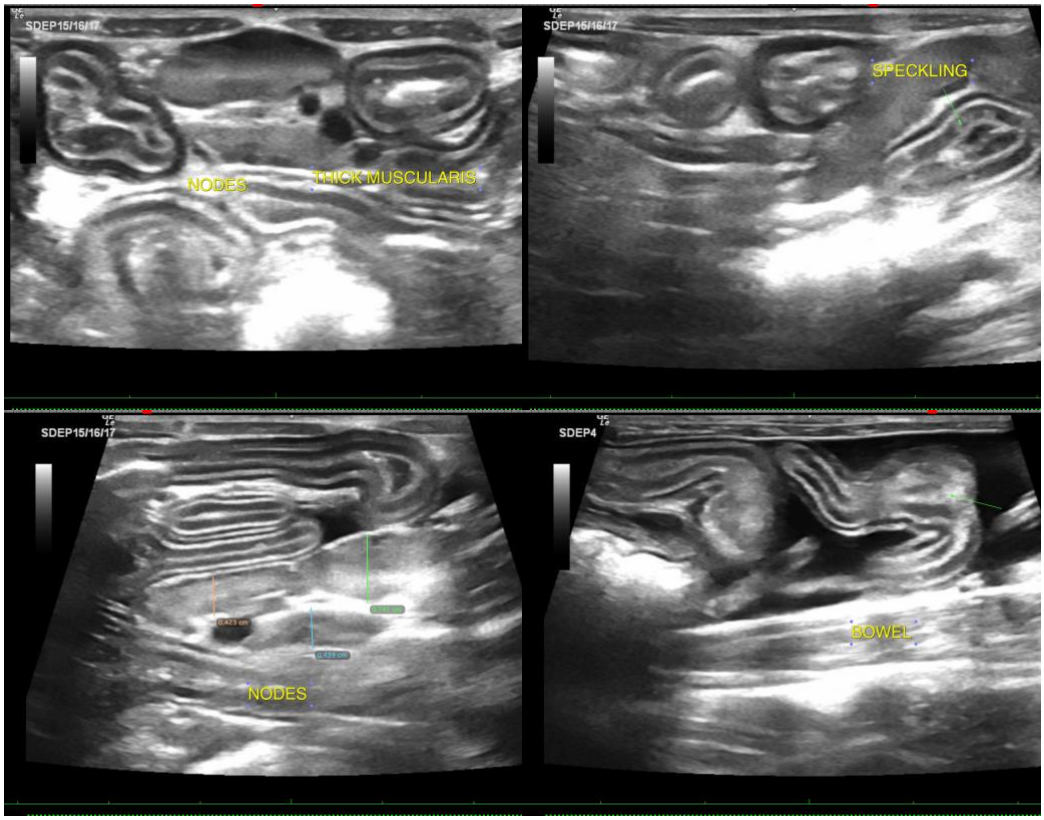
7/10/23

transition in diet, based on trial-and-error response, beginning with a hydrolyzed protein diet. Some patients respond to one brand/version of a hydrolyzed protein diet better than another brand, so several trials may be required.

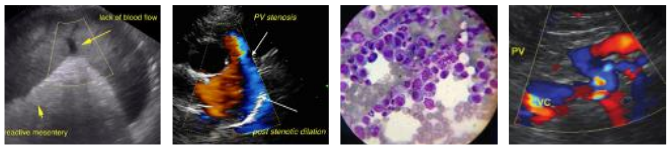
Additional considerations could include cobalamin supplementation (unless cobalamin level is evaluated and supplementation is not warranted) and prednisolone (if not contraindicated based on patient contraindications, co-morbidities, etc.).

Given the atypical appearing loop of bowel in the caudal abdomen, if biopsies are pursued, surgical vs endoscopic biopsies are recommended, so that that particular loop can be both palpably and visually inspected.

Alternatively, if endoscopy is preferential, recheck imaging of that area prior to pursuing more invasive intervention is recommended.



SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™



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

PATIENT

Jax Martell

SPECIES

Feline

BREED

Pixie-Bob

SEX

Neutered Male

AGE

10 Years

WEIGHT

3.4 kg

INTERPRETED BY

Beth Johnson, DVM DACVIM

IMAGING PERFORMED BY

Elyse Hauer

HOSPITAL NAME

Mariposa VH

REFERRING VET

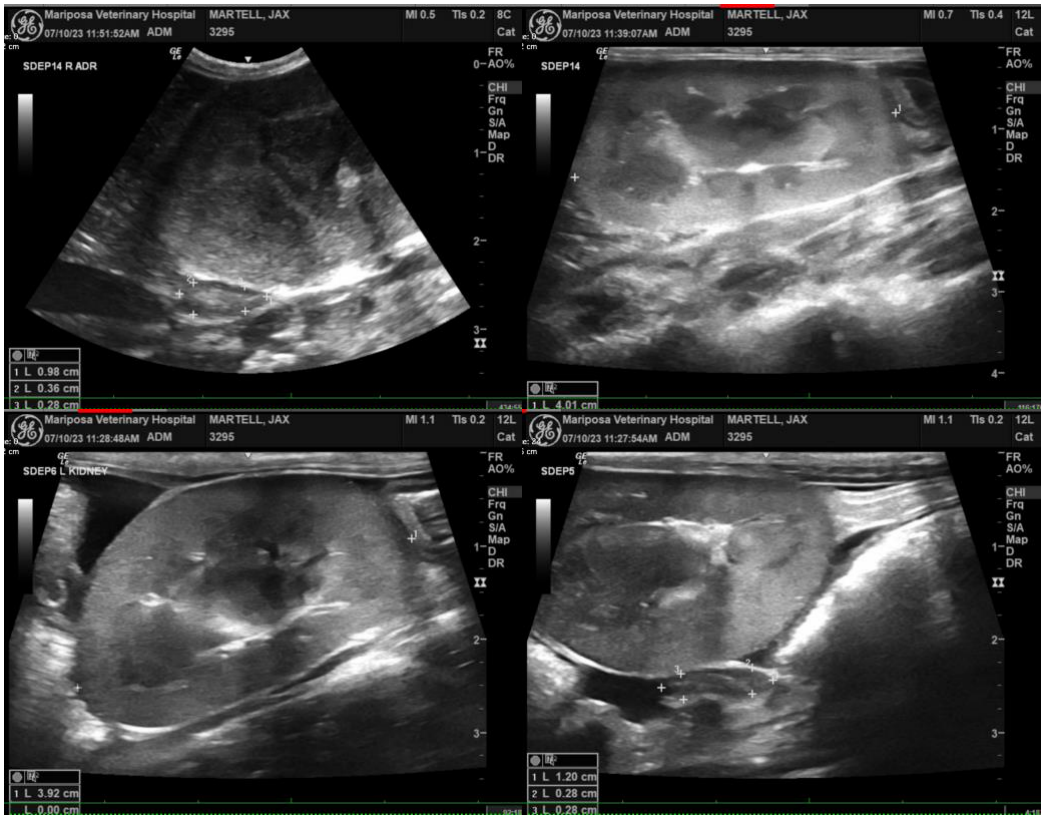
Elyse Hauer

INVOICE

23314

DATE

7/10/23



The information and recommendations provided are based on the images presented by the referring veterinarian. 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

info@sonopath.com