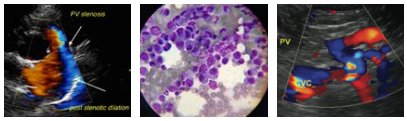
IMAGING PERFORMED BY

IntraPet.com

SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
1-800-838-4268 info@sonopath.com SonoPath.com

**DATE**

8/9/22

**PATIENT**

Twinkie Ey

**SPECIES**

Feline

**BREED**

Domestic Shorthair

**SEX**

Neutered male

**AGE**

8/6/12

**WEIGHT**

12.1 lbs

**INTERPRETED BY**

Beth Johnson, DVM DACVIM

**HOSPITAL NAME**

Animal Emergency Hospitatl

**REFERRING VET**

Dr. King

**INVOICE**

32260

## PRESENTING CLINICAL SIGNS

Hx of IBD? owner stated had surgery when kitten and has been on HA diet since Seen on July 22, constipated, gave 1 enema and sent with lactulose not eating well on the food tonight, overall lethargic, not eating, -- has not seen straining, worried about blockage/constipation
Current Medications: Gabapentin, Cerenia, Mirtazapine.
Lab Results: See attached.
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*

Urinary bladder is adequately distended. It has a normal uniform wall thickness. Contents include primarily anechoic fluid with occasional echogenic non-shadowing debris, most consistent with incidental suspended lipid in a cat, possibly combined with exfoliated cells, mucous and/or small blood clots. Both sterile inflammation as well as urinary tract infection can also present with echogenic debris. No masses or cystoliths are observed. The trigone and visible pelvic urethra are normal in thickness with a smooth mucosal surface.

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, mineral or infarcts observed. The left kidney measured 4.06 cm. The right kidney measured 3.96 cm.

### *Adrenal Glands*

Left adrenal gland is normal in size (051 cm), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

Right adrenal gland is normal in size (0.44 cm), 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 hyperechoic, without evident loss of layering appreciated. The lumen of the small intestine is empty with no evidence of obstruction or foreign material.

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, hypoechoic to surrounding tissue and has a mildly irregular undulating contour. Parenchyma is coarse with mixed echogenic remodeling noted. Pancreatic duct dilation is noted.

### *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

- **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. No aggressive lymphadenopathy, loss of layering, etc. is noted to make lymphoma more probable, but lymphoma cannot be definitively ruled out without tissue sampling.

- **Chronic active pancreatitis.**

### Secondary Findings

- **Urinary bladder debris.**

- **Age related renal change.**

## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

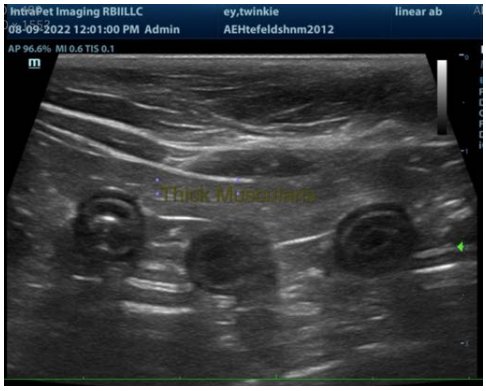
Given the reported history of IBD combined with the ultrasonographic changes in the bowel, recommendations include the following to assess if additional medical management is necessary such as cobalamin supplementation, etc.

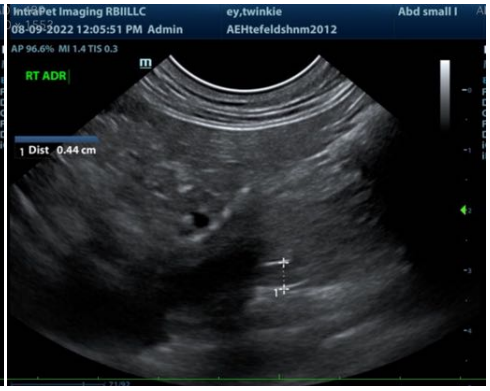
- A gastrointestinal malabsorption panel (including cobalamin, folate, TLI and PLI) to Texas A&M GI Laboratory is recommended for further evaluation of GI and pancreatic function.

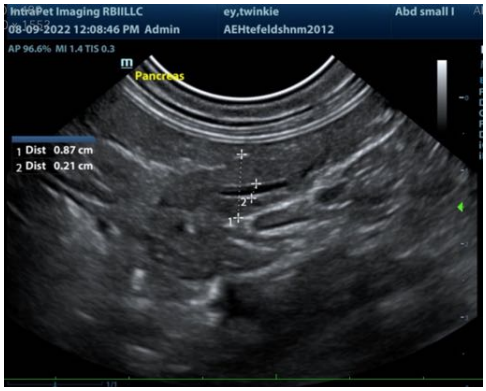
- Given the reported constipation the addition of fiber to the diet as well as the already in place Lactulose may be beneficial. Ultimately transition to colitis fiber response, constipation management and diet may be necessary. However, this could exacerbate the reported previously diagnosed inflammatory bowel disease.

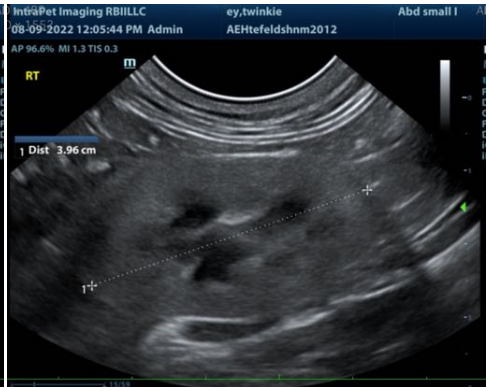
- Urinalysis and, if indicated based on urinalysis results, urine culture are recommended. If protein is present in an otherwise quiet sediment, protein quantification with a urine protein to creatinine ration is recommended.

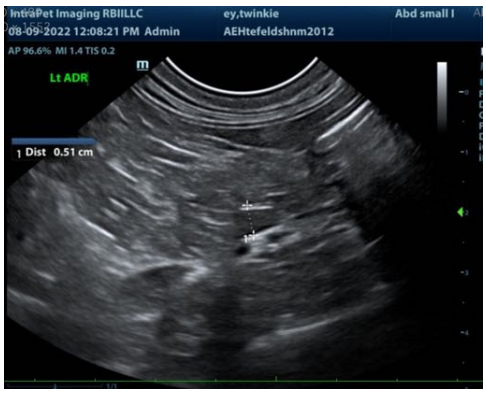
- This patient's anemia could be contributing to clinical signs. Given the anemia empirical deworming with a 5 day course of Panacur is recommended as well as empirical therapy with an antacid with monitoring of the anemia for improvement. If the anemia does not resolve and/or progresses further work-up of the anemia is recommended potentially beginning with comprehensive infectious disease testing.

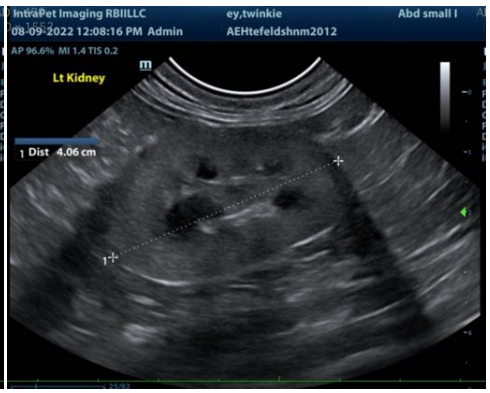


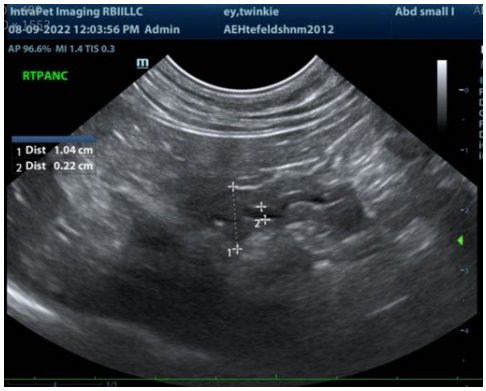



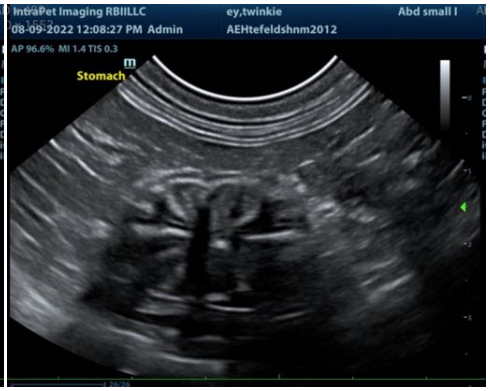



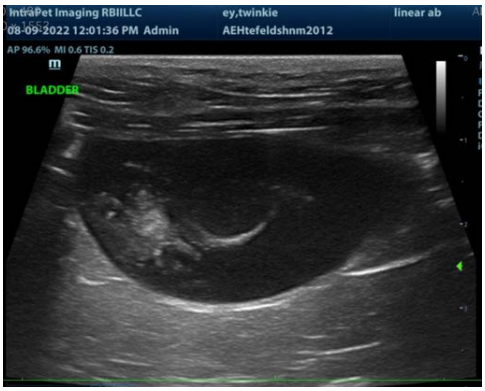






**The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.**

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**
Beth.Johnson@SonoPath.com