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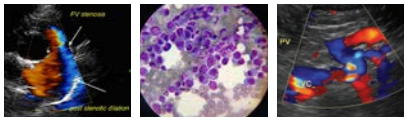

SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
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DATE

8/24/22

PATIENT

Butterscotch Scott

SPECIES

Feline

BREED

DSH

SEX

Spayed Female

AGE

5/29/08

WEIGHT

10 Pounds

INTERPRETED BY

Beth Johnson, DVM DACVIM

IMAGING PERFORMED BY

Rachel Brilhart RDMS

HOSPITAL NAME

Paradise AH

REFERRING VET

Dr. Halpern

INVOICE

40714

PRESENTING CLINICAL SIGNS

History of IBD/ Small cell lymphoma diagnosed at AVIMO in 2019. Has been managed on Chlorambucil 1.5 mg BIW and Prednisolone 5mg SID. P has had persistent diarrhea. We have tried the following: 1) Hypoallergenic diet -- didn't eat this well 2) Metronidazole 10mg/kg BID -- P feels and acts better on this, but still has diarrhea 3) Probiotics including fortiflora and proviable w/ kaopectate paste 4) Prednisolone 5 mg BID -- no appreciable change in clinical signs 5) Tylan -- no change
6) B12 injectable and oral-- no appreciable change 7) Most recent trial -- Originally on Chlorambucil 1 mg BIW. Increased to 1.5 mg BIW and P began having darker stools and more stool incontinence. Still eating very well and interactive, looking for affection, still cognitively sound. Recent bloodwork on this dose of chlorambucil revealed a mildly low Alb and BUN, leading to concern for liver dysfunction -- r/o secondary to chlorambucil vs progressive neoplastic disease. P had also lost 3 lb from the end of May to the beginning of Aug and O reports progressive weight loss at home. Based on conversation had today, P is having more and more stool issues. Advised to stop chlorambucil x 1 week to see if there is improvement. if no improvement, then restart chlorambucil 1
mg SIW (lower dose). Is about to start metronidazole again as helps P feel better.

Current Medications: Chlorambucil 1.5 mg PO BIW (just reduced to 1 mg SIW) for >6 mo, Prednisolone 5mg BID for >2 years, B12 Injectable + cobalequin, Metronidazole 10mg/kg BID -- currently receiving, but used intermittently, Hills I/D
Lab Results: Most recent BW results (8/3): BUN= 15 (16-37), crea = 1.1 wnl, Alb = 2.2 (2.3-4), TP wnl, Normocytic normochromic non regenerative anemia, Mild leukocytosis characterized by mild neutrophilia with suspected left shift, Tbil wnl, TT4= 1.2
Radiographs: May show OA, some gas distension in GI loops with obvious peristalsis and some aerophagia.
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.

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.

Kidneys are significantly enlarged in size with increased cortical echogenicity and disruption of normal corticomedullary architecture caused by multifocal heterogenous (primarily hypoechoic) nodules. A hypoechoic subcapsular rim “halo” is present. The pericapsular area is enhanced by hyperechoic fat and mesentery. No mineral is observed. The pathology is more significant on the right than the left. The left kidney measures 4.07 cm. The right kidney measures 4.26 cm.

Adrenal Glands

The right adrenal gland is normal in size (0.36 cm), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

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

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 mottled by multifocal discrete hypoechoic nodules of varying sizes "moth-eaten". 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. A tortuous, non-pathologically distended common bile duct is present, which can be a normal anatomic variant in senior cats.

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 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, with multifocal areas of thickened wall and loss of mural detail. The lumen is empty with no evidence of obstruction or foreign material.

At the area of the Ileocecocolic junction, there is a mass resulting in hypoechoic complete loss of layering. The mass is surrounded by enhanced hyperechoic fat and mesentery.

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.

Mesenteric lymph nodes are enlarged with swollen irregular capsular contour and loss of normal length to width ratio (rounded in shape). Nodes are hypoechoic with loss of normal parenchymal detail.

ULTRASONOGRAPHIC FINDINGS

- **Renal lymphoma –** This appearance is highly suggestive of renal lymphoma. Other malignant neoplasia, severe nephritis and feline infectious peritonitis can at times mimic this presentation, but it's less common.

- **Nodular Liver -** This finding is concerning for infiltrative disease such as round cell neoplasia or metastatic neoplasia. Benign disease (nodular hyperplasia) cannot be ruled out but is considered less likely.

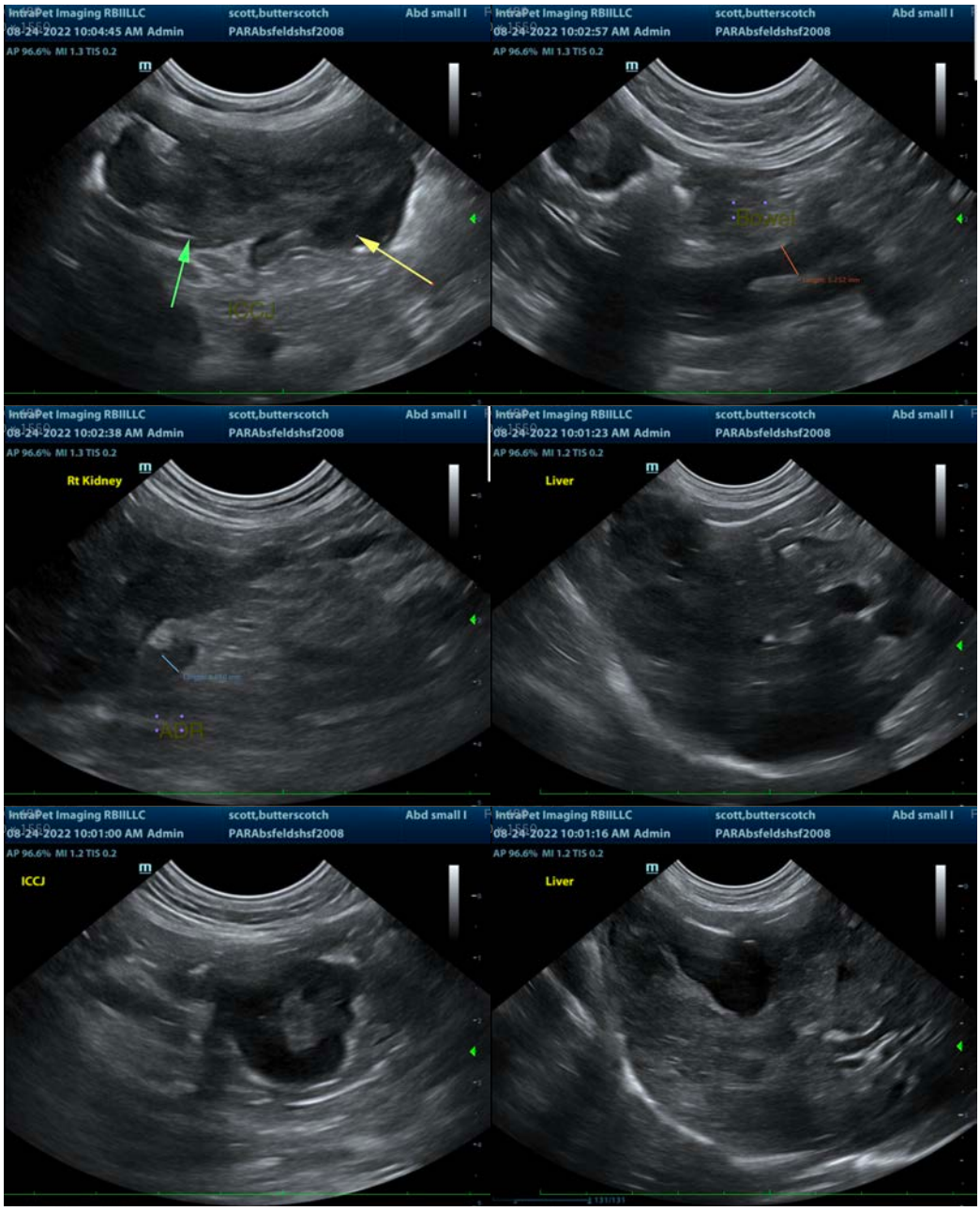
- **Gastrointestinal lymphoma (suspect) pattern –** Thick muscularis has been reported with infiltrative bowel disease including both benign inflammatory disease as well as infiltrative neoplasia such as lymphoma. Given the concurrent pathology noted, infiltrative neoplasia is considered more likely, but benign IBD cannot be ruled out without tissue sampling.

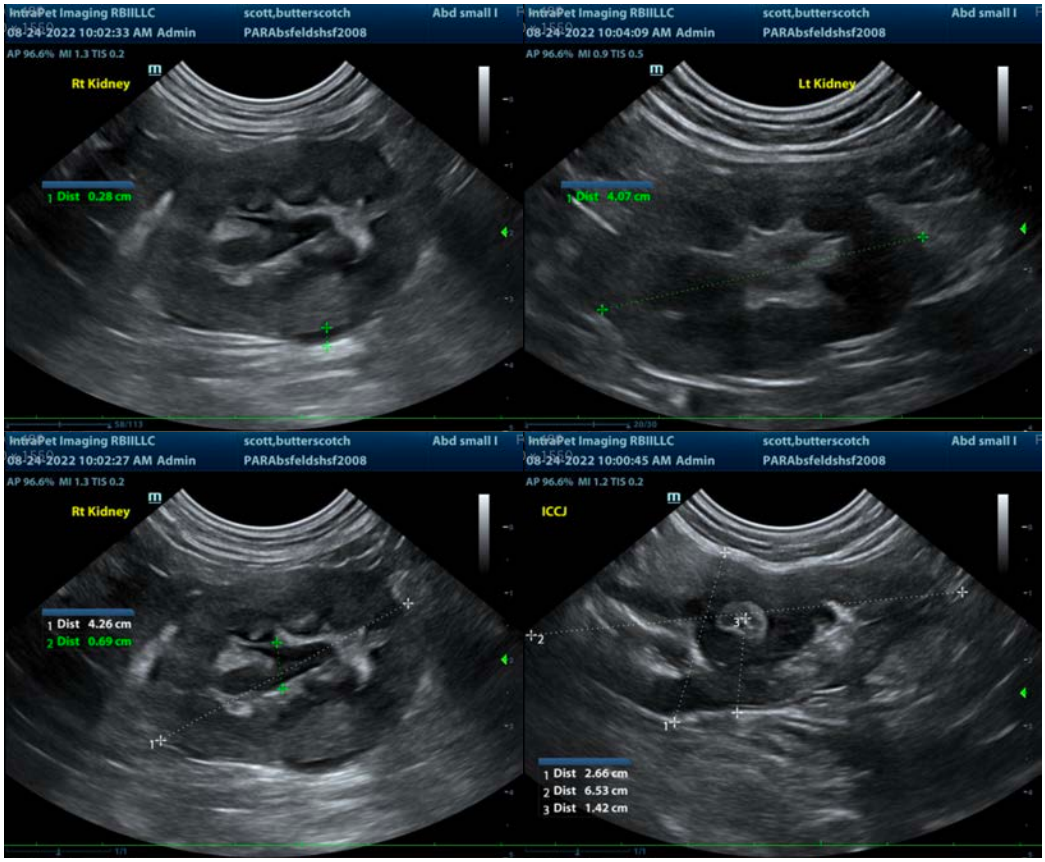
- **Mass at the Ileocecocolic junction –** Most concerning for infiltrative lymphoma.

- **Aggressive mesenteric lymph nodes –** most consistent with infiltrative round cell or metastatic neoplasia. A benign aggressive inflammatory response cannot be ruled out without tissue sampling +/- culture.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The pathology present in these images is most concerning for lymphoma, given this patient's history. Therefore, recommendations include follow up with a board certified oncologist to discuss any additional therapeutic recommendations beyond the immunosuppression and chemotherapy already in place.





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.

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