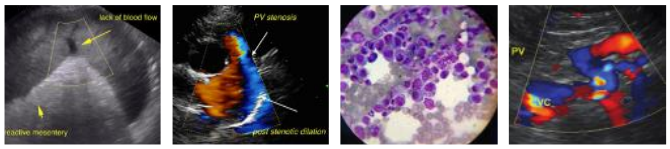
SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™



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

PATIENT

Jack Murdock

SPECIES

Feline

BREED

DSH

SEX

Neutered Male

AGE

11 Years 2 Months

WEIGHT

10.88 Pounds

INTERPRETED BY

Beth Johnson, DVM DACVIM

IMAGING PERFORMED BY

Dr. Katie Buss

HOSPITAL NAME

Kings VH

REFERRING VET

Dr. Alex Thomas

INVOICE

20657

DATE

1/20/23

PRESENTING CLINICAL SIGNS

History: History of suspected triaditis, currently managed on prednisolone and B12. Patient responded well initially but has continued to lose weight. Concerns for possible lymphoma.

Abnormal PE/Chem/CBC/UA Results: Elevated ALT (401) , ALP (143) , Globulin, bilirubin, and TP. Abnormal PLI. Unremarkable CBC.

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.

Left kidney is normal is size (4.0 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 is size (4.3 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

The adrenal glands are unable to be well visualized in these images.

Spleen

Spleen is subjectively large in size with a mildly swollen but smooth capsule. Parenchyma is normal and homogenous in echogenicity and echotexture. Multifocal well-demarcated hyperechoic homogenous nodules are noted throughout the parenchyma. Splenic vasculature appears normal.

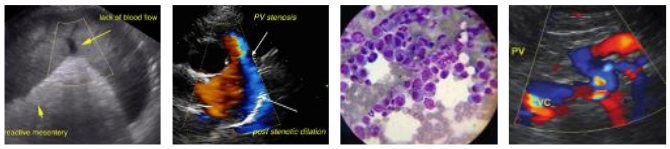
Liver

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.

Gallbladder is non-distended in size. The wall is smooth without visible thickening. Luminal contents are primarily anechoic. The cystic and common bile duct are tortuous, not pathologically distended which is likely a normal anatomic variant in a cat. Chronic or resolved cholangitis can’t be ruled out and this finding should be interpreted in combination with clinical signs and or laboratory changes to support it.

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.



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

PATIENT

Jack Murdock

SPECIES

Feline

BREED

DSH

SEX

Neutered Male

AGE

11 Years 2 Months

WEIGHT

10.88 Pounds

INTERPRETED BY

Beth Johnson, DVM DACVIM

IMAGING PERFORMED BY

Dr. Katie Buss

HOSPITAL NAME

Kings VH

REFERRING VET

Dr. Alex Thomas

INVOICE

20657

DATE

1/20/23

The visible small intestines are normal in wall thickness and layering. 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 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 large amount of anechoic free fluid noted in these images, as well as clumped almost nodular appearing mesentery.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- Hypersplenism with hyperechoic splenic nodules – can be associated with congestion caused by sedation (if sedated) but can also be associated with diffuse infiltrative disease. Both benign conditions such as extramedullary hematopoiesis, lymphoid hyperplasia, amyloidosis (leave amyloidosis out if canine) as well as infiltrative neoplastic diseases such as round cell neoplasia should be considered. The hyperechoic splenic nodules are most consistent with benign myelolipomas. Other differentials such as fibrosis or calcification caused by old hematomas or infarcts, chronic inflammation, granulomatous disease or metastatic disease cannot be ruled out, but are considered less likely.

- 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.

- Free fluid and clumped mesentery are concerning for a paraneoplastic effusion/occurrence. A benign fluid, secondary to decreased albumin or vascular or lymphatic congestion, vasculitis , etc., is possible and can't be diagnosed without sampling.

Secondary Findings

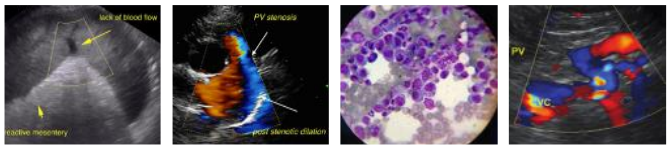
- Urinary bladder debris

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Sampling of the free abdominal fluid is recommended, as is a fine needle aspirate of the liver +/- the spleen, all if patients coagulation status is appropriate. If a cytologic diagnosis of infiltrative neoplasia, such as lymphoma is not diagnosed, including biopsies of the GI tract may ultimately be required for a definitive diagnosis, given this patients history of medically managed IBD.

In the meantime, if not recently evaluated, T4/free T4 are also recommended, as hyperthyroidism can result in weight loss and increased liver enzymes, although the free fluid and liver parenchymal changes wouldn't be expected.

SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™



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

PATIENT

Jack Murdock

SPECIES

Feline

BREED

DSH

SEX

Neutered Male

AGE

11 Years 2 Months

WEIGHT

10.88 Pounds

INTERPRETED BY

Beth Johnson, DVM DACVIM

IMAGING PERFORMED BY

Dr. Katie Buss

HOSPITAL NAME

Kings VH

REFERRING VET

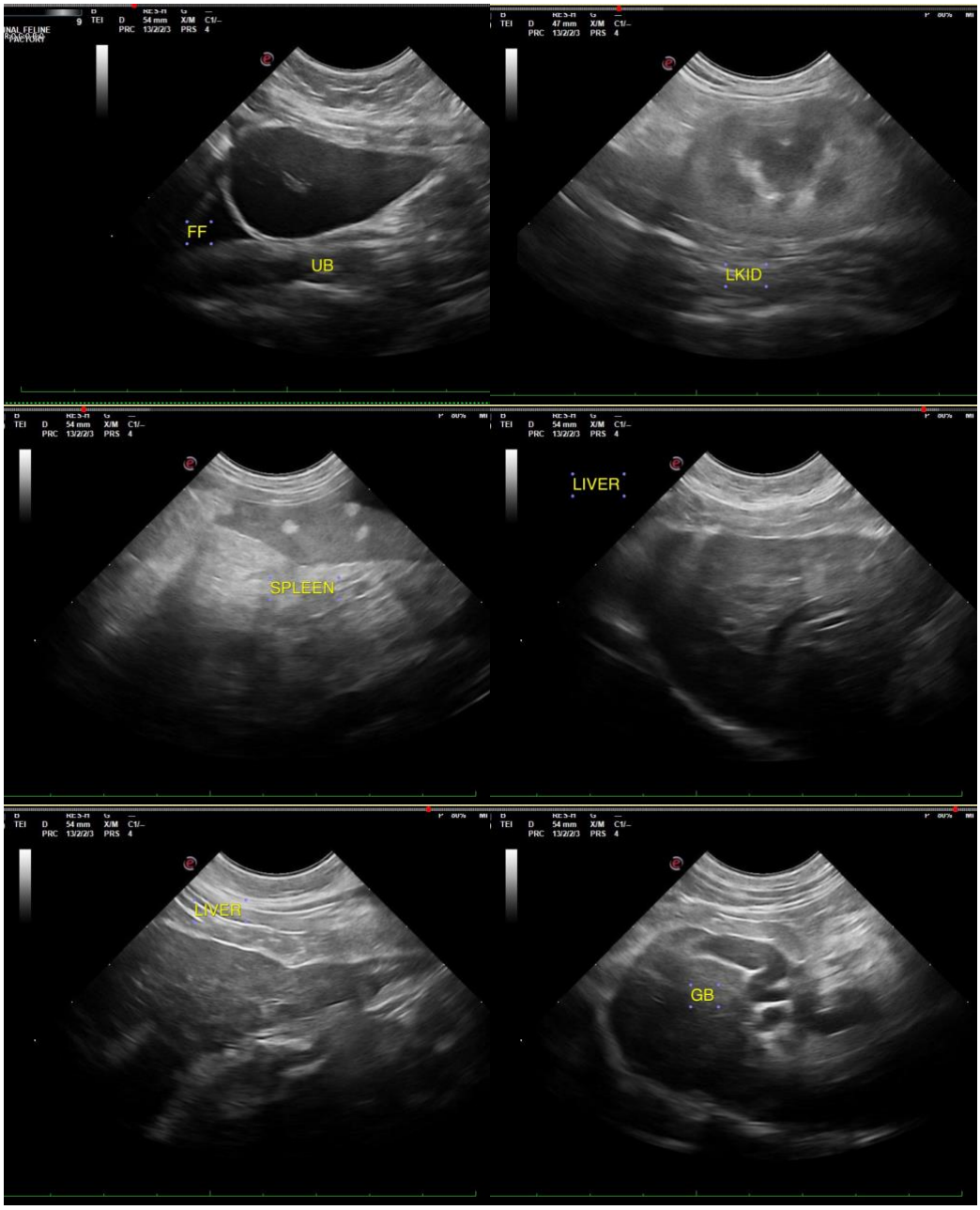
Dr. Alex Thomas

INVOICE

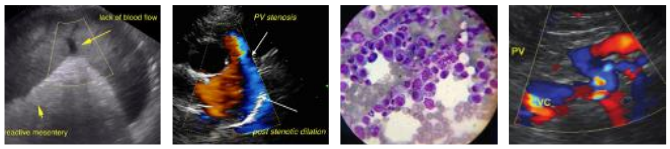
20657

DATE

1/20/23



SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™



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

PATIENT

Jack Murdock

SPECIES

Feline

BREED

DSH

SEX

Neutered Male

AGE

11 Years 2 Months

WEIGHT

10.88 Pounds

INTERPRETED BY

Beth Johnson, DVM DACVIM

IMAGING PERFORMED BY

Dr. Katie Buss

HOSPITAL NAME

Kings VH

REFERRING VET

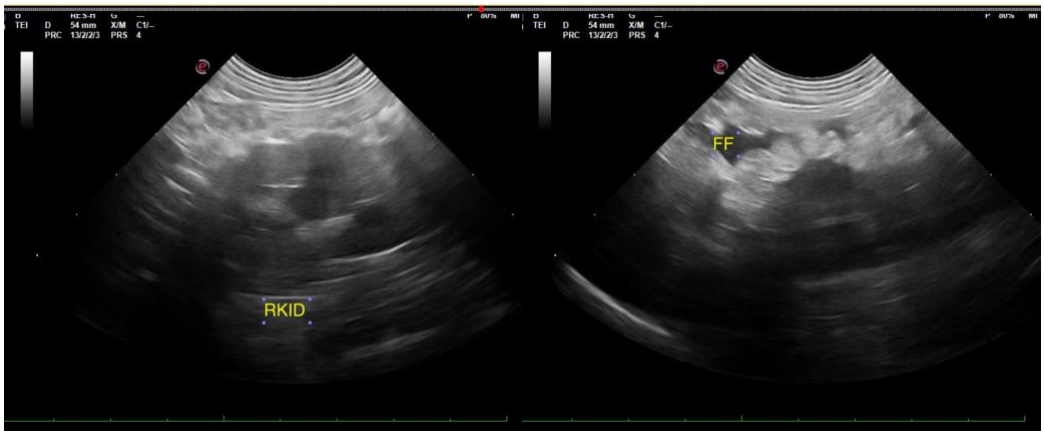
Dr. Alex Thomas

INVOICE

20657

DATE

1/20/23



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

Beth.Johnson@SonoPath.com