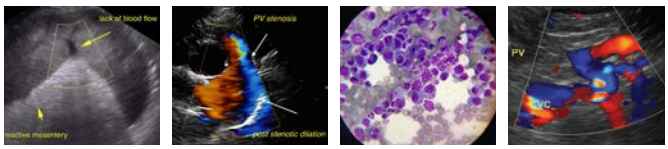
SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™



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

PATIENT
Boo Denlinger

SPECIES
Feline

BREED
DSH

SEX
Neutered Male

AGE
7 Years

WEIGHT
11 Pounds

INTERPRETED BY
Beth Johnson, DVM
DACVIM

IMAGING PERFORMED BY
Jack Reese

HOSPITAL NAME
Willow Run VC

REFERRING VET
Dr. Katelyn Newcamp

INVOICE
41154

DATE
9/8/22

PRESENTING CLINICAL SIGNS

Decreased appetite for 1 month duration, vomiting more recently. Indoor/outdoor, owner unaware of bathroom habits. Slight improvement with supportive care (SQ fluids, Cerenia, Miratazapine) Abnormal PE/Chem/CBC/UA Results: Elevated lipase 5230 (100-1400) Hypernatremia 166 (150-165).

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 normal in size with increased cortical echogenicity. Normal smooth peripheral margination and shape are maintained. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed. Infiltrative disease (infectious, neoplastic, etc.) or nephritis cannot be ruled out but is considered less likely. The left kidney measures 3.8 cm. The right kidney measures 4.6 cm.

Adrenal Glands

Adrenal glands are largely normal in size, shape and contour. Some parenchymal heterogenicity is present without concerning capsular distortion. These changes are more noticeable in the right adrenal gland likely normal for this age but should be monitored if there is any suspicion of adrenal disease. The left adrenal gland measures 0.45 cm thick. The right adrenal gland measured 0.84 cm thick.

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

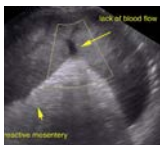
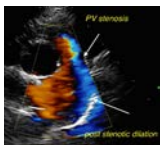
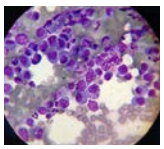
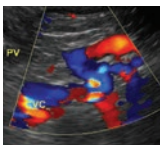
The liver is subjectively enlarged with irregular margins created by the presence of multifocal hyperechoic nodules with hypoechoic rim (target lesions creating a “motheaten” appearance). Visible vasculature and biliary tree appear normal without distension or congestion. The nodules/masses range from 1.0 cm in size to a deep mixed mass in the right liver that measures approximately 3.0 cm in diameter.

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

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

PATIENT

Boo Denlinger

SPECIES

Feline

BREED

DSH

SEX

Neutered Male

AGE

7 Years

WEIGHT

11 Pounds

INTERPRETED BY

Beth Johnson, DVM DACVIM

IMAGING PERFORMED BY

Jack Reese

HOSPITAL NAME

Willow Run VC

REFERRING VET

Dr. Katelyn Newcamp

INVOICE

41154

DATE

9/8/22

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 (< 0.2 cm) and layering. Contents are consistent with normal formed feces and gas.

Pancreas

In the area of the pancreas just caudal to the stomach, there is a prominent, hypoechoic, mass-like structure with an irregular contour and coarse parenchyma, surrounded by slightly enhanced hyperechoic fat and mesentery, consistent with acute pancreatitis. However, an extension of the liver nodules/masses cannot be definitively ruled out.

Free Abdomen

There is a scant amount of anechoic free fluid in the cranial abdomen.

No appreciable lymphadenopathy noted in these images.

PRIMARY FINDINGS

- **Nodular Liver -** This finding is concerning for infiltrative disease such as round cell neoplasia or metastatic neoplasia. Benign disease, such as infectious disease, granulomas, abscesses, etc. cannot be ruled out without tissue sampling.
- Acute pancreatitis is suspected

SECONDARY FINDINGS

- Urinary bladder debris
- Age related adrenal changes

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Three view thoracic radiographs are recommended for further assessment of cardio-pulmonary status as well as to further evaluate for any evidence of metastatic disease, if not recently evaluated.

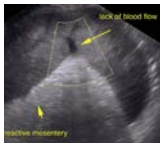
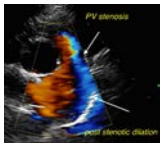
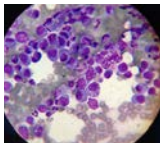
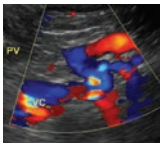
A fine needle aspirate of the liver nodules is recommended if patient's coagulation status is appropriate.

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.

In the meantime, supportive/symptomatic medical management, as is already resulting in some reported improvement for possible pancreatitis is recommended.

Given this patient's indoor/outdoor status, comprehensive viral and other infectious disease testing is also warranted pending the result of the liver aspirate.

SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™

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

PATIENT

Boo Denlinger

SPECIES

Feline

BREED

DSH

SEX

Neutered Male

AGE

7 Years

WEIGHT

11 Pounds

INTERPRETED BY

Beth Johnson, DVM
DACVIM

IMAGING PERFORMED BY

Jack Reese

HOSPITAL NAME

Willow Run VC

REFERRING VET

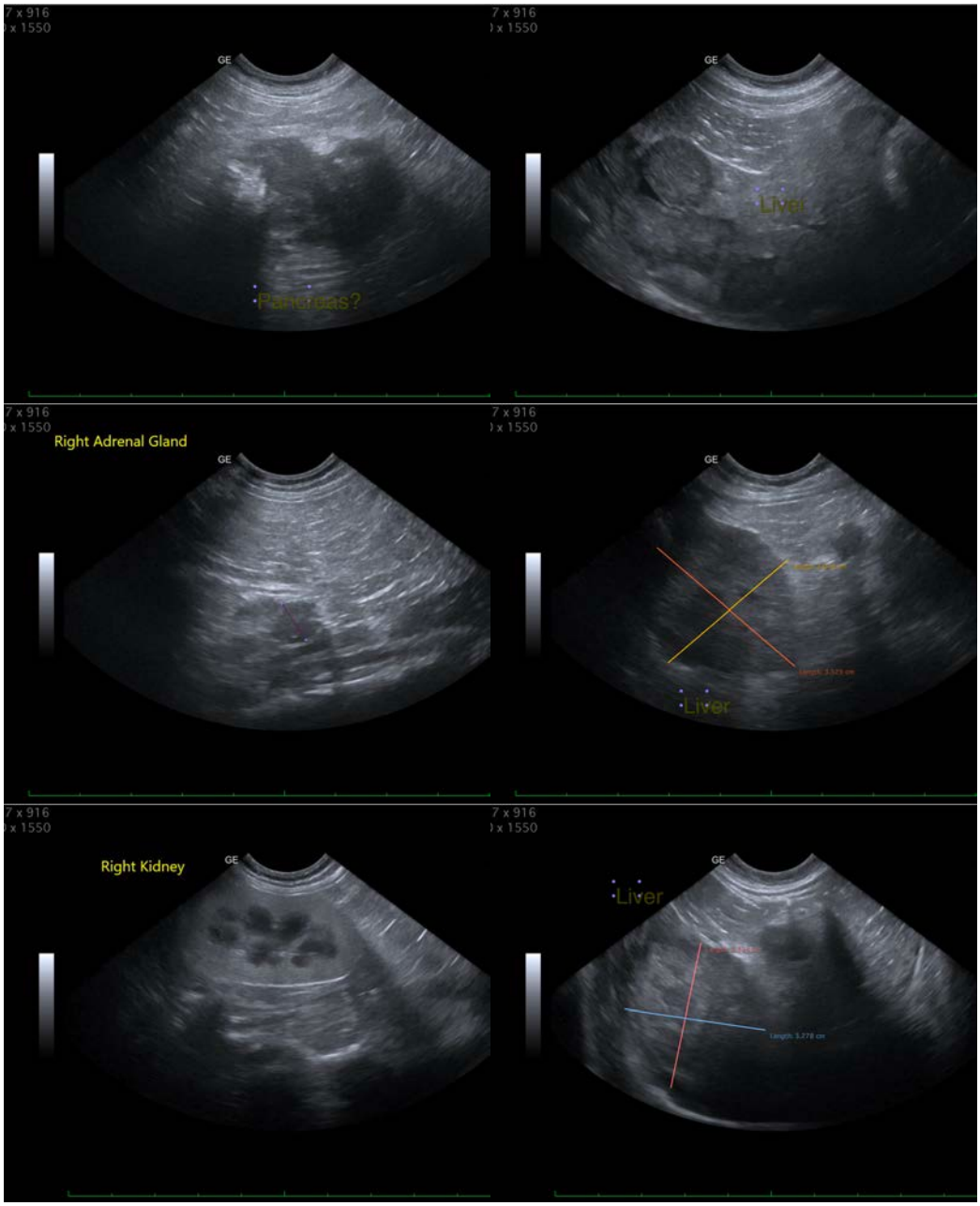
Dr. Katelyn Newcamp

INVOICE

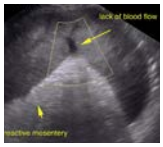
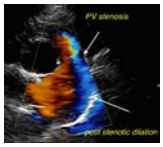
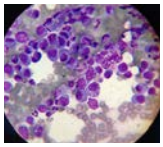
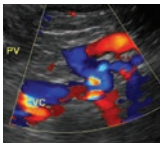
41154

DATE

9/8/22



SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™

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

PATIENT

Boo Denlinger

SPECIES

Feline

BREED

DSH

SEX

Neutered Male

AGE

7 Years

WEIGHT

11 Pounds

INTERPRETED BY

Beth Johnson, DVM DACVIM

IMAGING PERFORMED BY

Jack Reese

HOSPITAL NAME

Willow Run VC

REFERRING VET

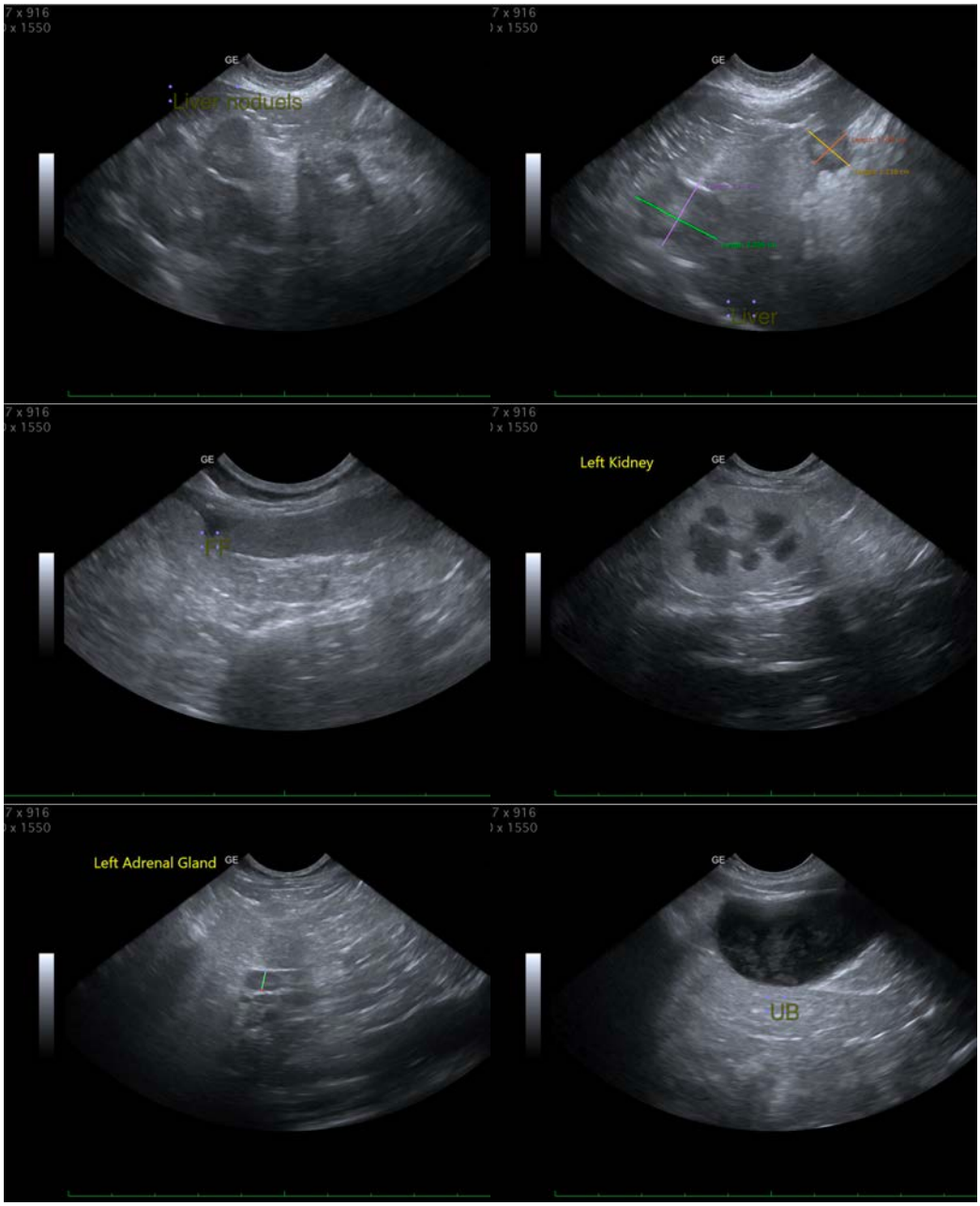
Dr. Katelyn Newcamp

INVOICE

41154

DATE

9/8/22



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