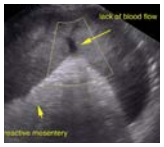
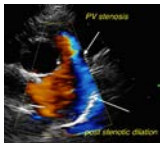
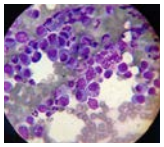
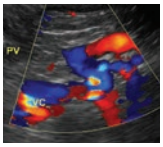
SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™

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

PATIENT
Bruiser Moyle

SPECIES
Canine

BREED
Dachshund

SEX
Neutered Male

AGE
13 Years

WEIGHT
7.7 kg

INTERPRETED BY
Beth Johnson, DVM DACVIM

IMAGING PERFORMED BY
Erin Wicks

HOSPITAL NAME
Shores VEC

REFERRING VET
Dr. Miller

INVOICE
44170

DATE
7/20/23

PRESENTING CLINICAL SIGNS

Presented at our hospital for seeing blood in the urine, just started today. Has been drippling urine and asking to go out frequently. No urine accidents while patient is sleeping. Previous Health Concerns: kidney stones passed on their own per owner Current Medications: none Appetite/When did they eat last: 3p full meal Diet: science diet k/d

Abnormal PE/Chem/CBC/UA Results: Cardiovascular: 1/6 murmur Genitourinary: large hard bladder; dripping frank blood from the urine Radiographs: large bladder; odd at trigone- possible stones and inflammation or tumor/mass Fast scan: bladder wall looks very thickened and lots of sludge in the bladder; trigone abnormal

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder is mildly distended, almost empty, with an apparent urinary catheter in place. Contents are primarily anechoic with some suspended and dependent mineral/sand an other echogenic debris. There is a heterogeneous, irregular, partially mineralized mass lesion in the trigone, extending down the proximal urethra to the level of the prostate, measuring overall approximately 5.0 cm x 2.5 cm in size.

The prostate is difficult to distinguish from the mass described below

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. Small cortical cysts are noted bilaterally. The left kidney measures 5.02 cm. The right kidney measured 5.13 cm.

Adrenal Glands

Adrenal glands are plump/swollen in size. Normal shape and contour are maintained without evidence of capsular invasion. Some parenchymal heterogenicity is present without concerning capsular distortion. Multifocal hyperechoic nodules are noted throughout both adrenal glands, including cranial and caudal pole of the left adrenal gland as well as the middle of the right adrenal gland. Visible surrounding vasculature appears normal.

Spleen

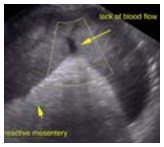
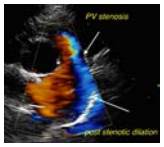
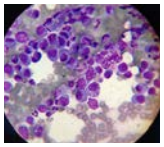
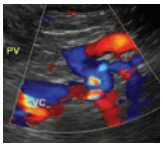
The spleen is subjectively normal in size with a normal smooth capsular contour. Parenchyma is appropriately finely textured and homogenous with normal echogenicity relative to surrounding tissue (hyperechoic to liver). No focal nodules or masses are observed. Splenic vasculature appears normal.

Liver

The liver is subjectively 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.

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.

SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™

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

PATIENT
Bruiser Moyle

SPECIES
Canine

BREED
Dachshund

SEX
Neutered Male

AGE
13 Years

WEIGHT
7.7 kg

INTERPRETED BY
Beth Johnson, DVM DACVIM

IMAGING PERFORMED BY
Erin Wicks

HOSPITAL NAME
Shores VEC

REFERRING VET
Dr. Miller

INVOICE
44170

DATE
7/20/23

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 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

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.

There is no apparent lymphadenopathy noted in these images.

PRIMARY FINDINGS

- **Urinary bladder mass –** Urinary bladder wall changes are most concerning for infiltrative neoplasia such as transitional cell carcinoma vs other. Benign inflammatory disease (cystitis) cannot be ruled out but is considered less likely given the location and appearance of the tissue.

- **Bilateral adrenomegaly with multiple hyperechoic nodules –** consistent with adrenal hyperplasia secondary to pituitary dependent hyperadrenocorticism vs stress or normal variant. Interpret in combination with clinical signs of hyperadrenocorticism. Differentials for the hyperechoic nodules include primary adrenal cortical adenoma or adenocarcinoma, pheochromocytoma, myelolipoma, adrenal hyperplasia secondary to pituitary disease or metastatic disease. Ultrasound alone cannot differentiate between functional and non-functional nodules and/or between benign and malignant disease. Small nodules without other evidence of abdominal disease (to suggest metastatic disease) and/or clinical signs (to suggest adrenal disease) are most often incidental and should be monitored.

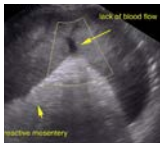
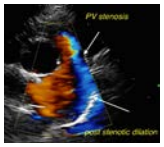
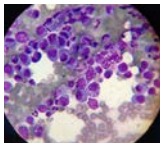
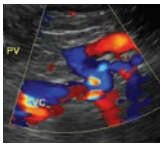
SECONDARY FINDINGS

- Age related kidney changes with multiple small bilateral renal cortical cysts

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.

Urinalysis and urine culture, if indicated based on urinalysis results, are recommended. Submission of urine to look for BRAF gene mutation, which is associated with urinary bladder cancer, could be

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

PATIENT

Bruiser Moyle

SPECIES

Canine

BREED

Dachshund

SEX

Neutered Male

AGE

13 Years

WEIGHT

7.7 kg

INTERPRETED BY

Beth Johnson, DVM DACVIM

IMAGING PERFORMED BY

Erin Wicks

HOSPITAL NAME

Shores VEC

REFERRING VET

Dr. Miller

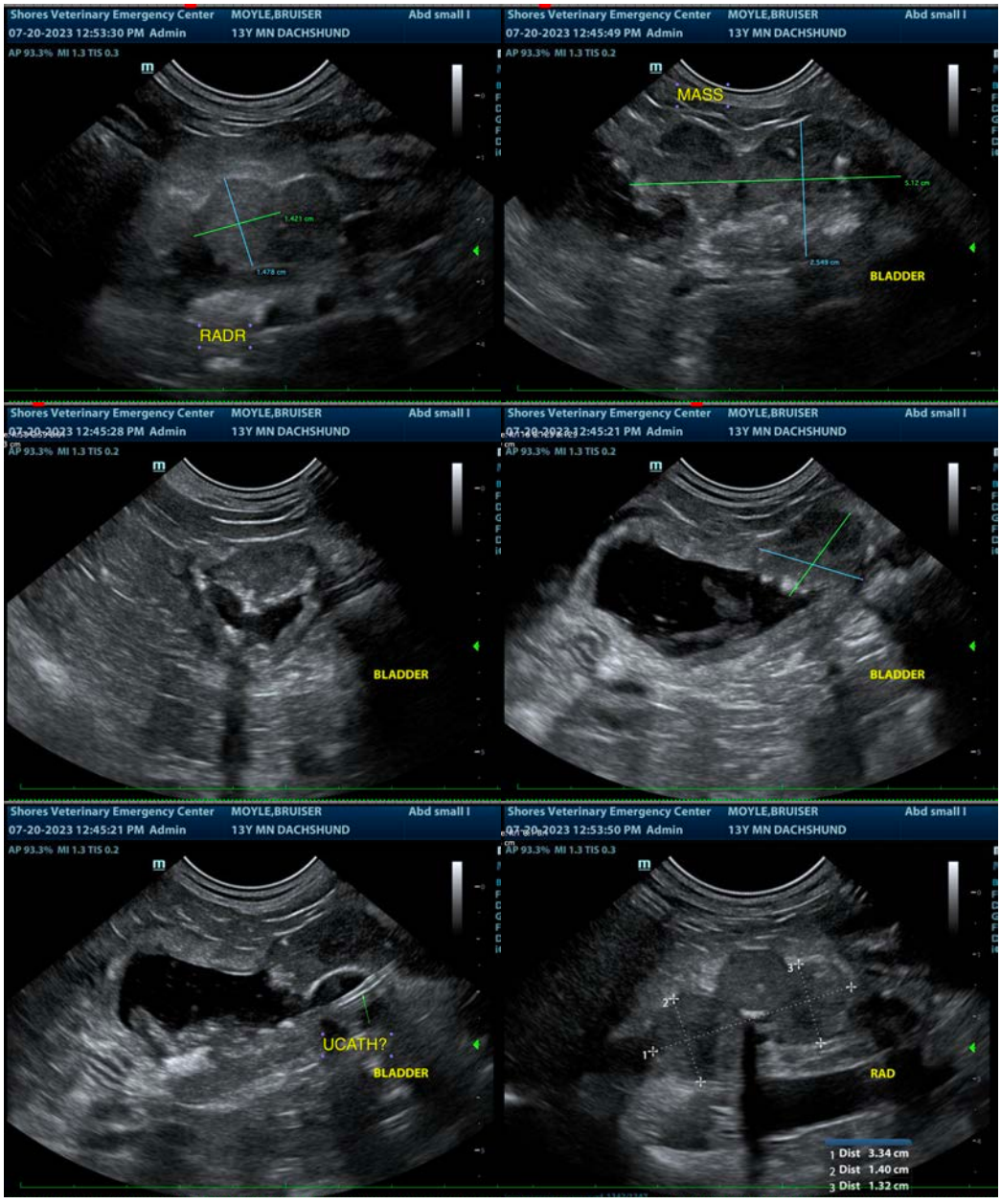
INVOICE

44170

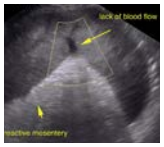
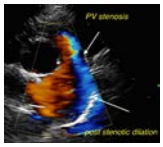
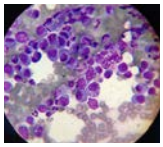
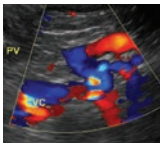
DATE

7/20/23

considered. Other diagnostic options include traumatic catheterization, fine needle aspirate (with small risk of tumor seeding/trailing) or cystoscopy for further sampling.



SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™

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

PATIENT

Bruiser Moyle

SPECIES

Canine

BREED

Dachshund

SEX

Neutered Male

AGE

13 Years

WEIGHT

7.7 kg

INTERPRETED BY

Beth Johnson, DVM DACVIM

IMAGING PERFORMED BY

Erin Wicks

HOSPITAL NAME

Shores VEC

REFERRING VET

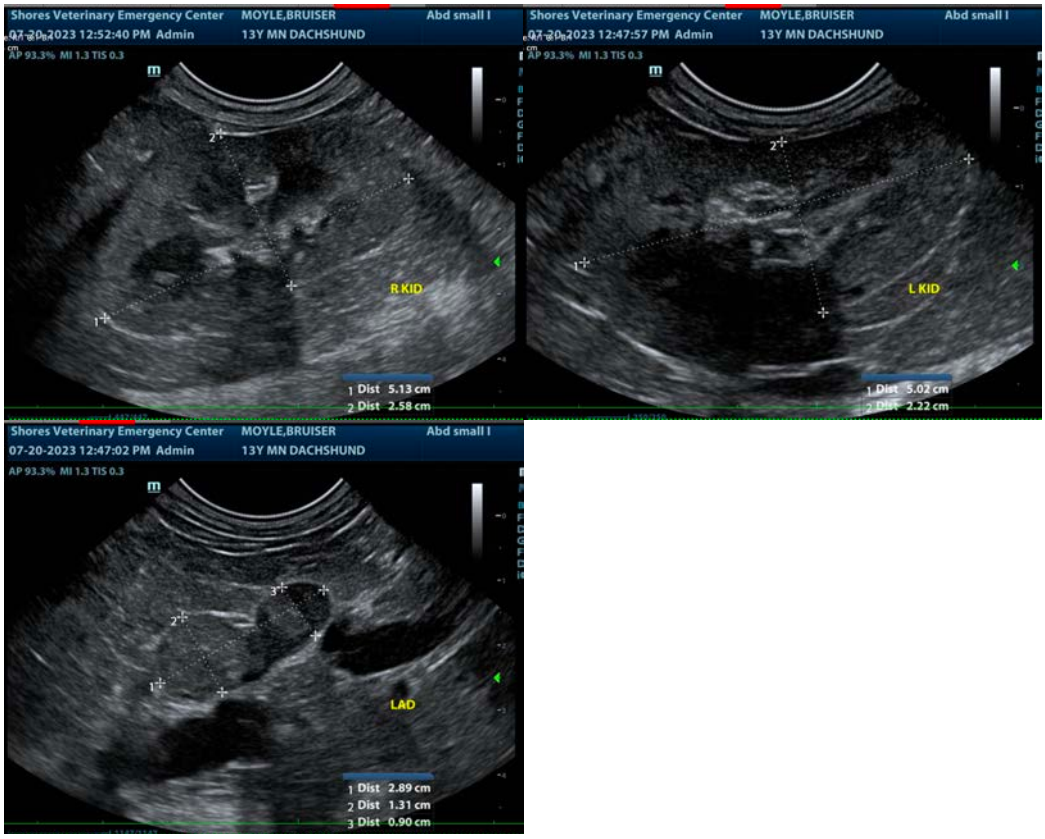
Dr. Miller

INVOICE

44170

DATE

7/20/23



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
info@sonopath.com