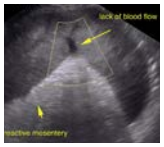
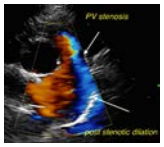
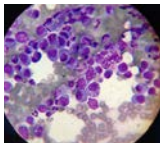
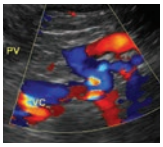
SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™

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

PATIENT
Chelsea Bradford

SPECIES
Canine

BREED
Pug

SEX
Spayed Female

AGE
13 Years

WEIGHT
19 Pounds

INTERPRETED BY
Beth Johnson, DVM DACVIM

IMAGING PERFORMED BY
Kelly Vazquez

HOSPITAL NAME
New Bridge VP

REFERRING VET
Dr. Abina Glennon

INVOICE
43949

DATE
7/12/23

PRESENTING CLINICAL SIGNS

Patient presents for large urinary bladder. Owner reports Chelsea is able to urinate on her own and has a nice stream. Rule out obstruction vs. other.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder is moderately to markedly overdistended with primarily anechoic contents and a small mild amount of echogenic debris. No masses, inflammatory changes, or cystoliths are observed. The bladder wall is normal in thickness with a smooth mucosal surface. However, the proximal urethra is mildly thick, measuring 0.37 cm thick with a subtly heterogeneous, hyperechoic wall. The thickened wall is smooth and symmetrical. No mineral is observed.

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 mineral or infarcts observed. The left kidney measures 4.26 cm with pyelectasia measuring 0.36 cm in the sagittal view. The right kidney measures 4.77 cm.

Adrenal Glands

The right adrenal gland is normal in size (0.49 cm at the cranial pole and 0.46 cm at the caudal pole), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

The left adrenal gland is normal in size (0.37 cm at the cranial pole and 0.54 cm at the caudal pole), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

Spleen

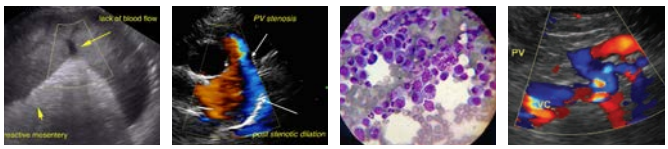
Spleen is subjectively normal in size with a normal smooth capsular contour. Parenchyma is appropriately finely textured and homogenous with normal echogenicity relative to surrounding tissue (hyperechoic to liver). On the tail of the spleen there is a 0.50 cm x 0.80 cm non-capsule disrupting hypo- to anechoic nodule, and near the head of the spleen there is an approximately 3.0 cm in diameter, similar appearing, hypo- to primarily anechoic nodule/mass that results in mild capsular bulge, but no evident capsular escape. Multifocal mineral foci are noted. 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.

Gallbladder is moderately distended with anechoic bile as well as suspended and gravity dependent echogenic debris. The wall is smooth without visible thickening. There is no evidence of cystic or CBD dilation. There is no evidence of effusion or inflammation.

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



PATIENT
Chelsea Bradford

SPECIES
Canine

BREED
Pug

SEX
Spayed Female

AGE
13 Years

WEIGHT
19 Pounds

INTERPRETED BY
Beth Johnson, DVM DACVIM

IMAGING PERFORMED BY
Kelly Vazquez

HOSPITAL NAME
New Bridge VP

REFERRING VET
Dr. Abina Glennon

INVOICE
43949

DATE
7/12/23

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 mildly distended with fluid, as well as echogenic nonshadowing luminal contents and gas consistent with normal ingesta/chyme. There is 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. Hyperechoic mucosal fogging or speckling is noted. Small intestinal motility appears adequate (1-3 contractions per min). The lumen is mildly distended with echogenic non-shadowing luminal contents and gas consistent with normal ingesta. There is no evidence of obstruction or foreign material noted.

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.

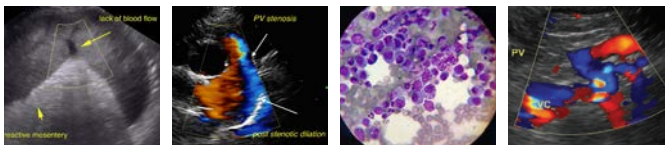
There is no evidence of heart base or pericardial pathology noted in these images at this time. If cardiac function evaluation is desired a full echocardiogram is recommended.

ULTRASONOGRAPHIC FINDINGS

- This patient's urinary bladder does appear to be moderately overdistended with a mildly thick urethra, which is most consistent with a benign inflammatory change, given the smooth symmetric appearance. Having said that, early or emerging infiltrative neoplasia such as transitional sarcoma versus other cannot be definitively ruled out. The mild pyelectasia in the left kidney may also be related to this change.

- Spleen mineralization – This is a benign change but can be associated with endocrinopathies, especially hyperadrenocorticism. Additionally, the nodules/masses noted could also represent benign lesions such as cysts, hematomas, nodular hyperplasia, extramedullary hematopoiesis, etc. However, infiltrative neoplasia can mimic benign cystic or cavitated lesions and cannot be ruled out.

- Moderate gallbladder debris - Cholecystic debris is of unknown clinical significance. It can be seen with biliary stasis from fasting or illness. Cholecystic debris is not necessarily related to hepatobiliary disease. Echogenic bile is most commonly an incidental finding in dogs and should be interpreted in combination with clinical signs such as nausea, inappetence, cranial abdominal discomfort and/or laboratory changes such as increased ALP and/or increased Tbili.



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

PATIENT

Chelsea Bradford

SPECIES

Canine

BREED

Pug

SEX

Spayed Female

AGE

13 Years

WEIGHT

19 Pounds

INTERPRETED BY

Beth Johnson, DVM DACVIM

IMAGING PERFORMED BY

Kelly Vazquez

HOSPITAL NAME

New Bridge VP

REFERRING VET

Dr. Abina Glennon

INVOICE

43949

DATE

7/12/23

- Mucosal speckling – Mucosal speckling is often present with inflammatory bowel disease (IBD). It is not specific for type or severity of disease. Mild speckling change can occur as a normal patient variant in the post-prandial state.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Further recommendations for this patient are largely dependent on clinical signs as well as laboratory, urinalysis results, etc. For example, the gastrointestinal and gallbladder changes reported above are likely unrelated to the presuming complaint of a large bladder, but may need follow up intervention if clinical signs suggest clinical pathology.

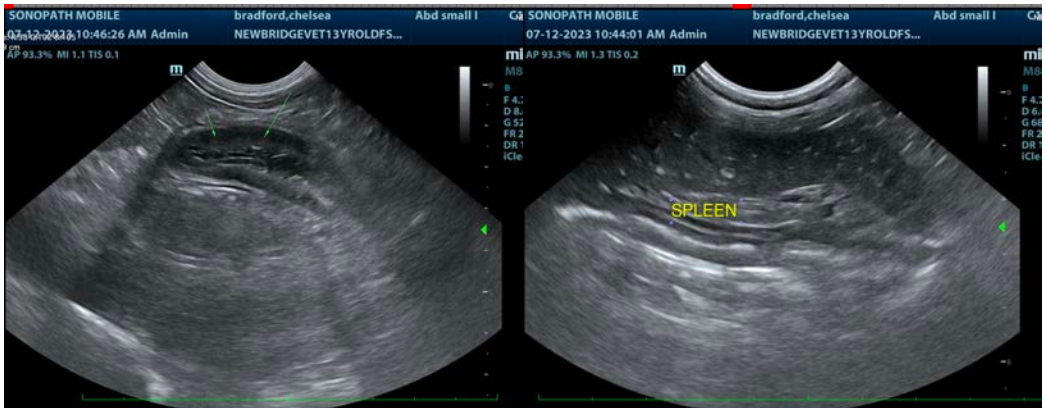
To begin with, if not recently evaluated, a general metabolic health screen is recommended in the form of a CBC/Chem panel, electrolytes, a urinalysis and, if indicated based on urinalysis results, urine culture. If protein is present in an otherwise quiet sediment, protein quantification with a urine protein to creatinine ratio is recommended.

Beyond that, further evaluation of the thickened urethra could be considered, beginning with submission of urine to look for BRAF gene mutation, which is associated with urinary bladder cancer. Other diagnostic options could include traumatic catheterization or even cystoscopy.

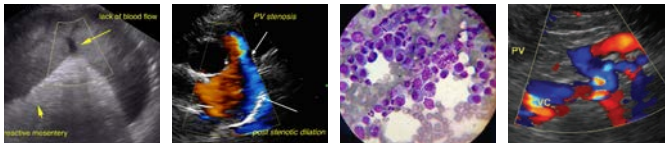
Given the concurrent splenic lesions, three view thoracic radiographs are recommended for further assessment of cardio-pulmonary status as well as to further evaluate for any evidence of metastatic disease, if not recently evaluated.

Further evaluation of the splenic lesions could be considered via a fine needle aspirate if patient's coagulation status is appropriate, being mindful of the possibility for hemorrhage in aspirating a cavitated lesion, versus potentially an exploratory laparotomy could be considered for splenectomy, given the risk of hemorrhage with even benign cavitated splenic lesion.

Alternatively, given the other concerns, plans, etc., monitoring of the splenic nodules ultrasonographically could be considered as a conservative approach.



SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™



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

PATIENT

Chelsea Bradford

SPECIES

Canine

BREED

Pug

SEX

Spayed Female

AGE

13 Years

WEIGHT

19 Pounds

INTERPRETED BY

Beth Johnson, DVM
DACVIM

IMAGING PERFORMED BY

Kelly Vazquez

HOSPITAL NAME

New Bridge VP

REFERRING VET

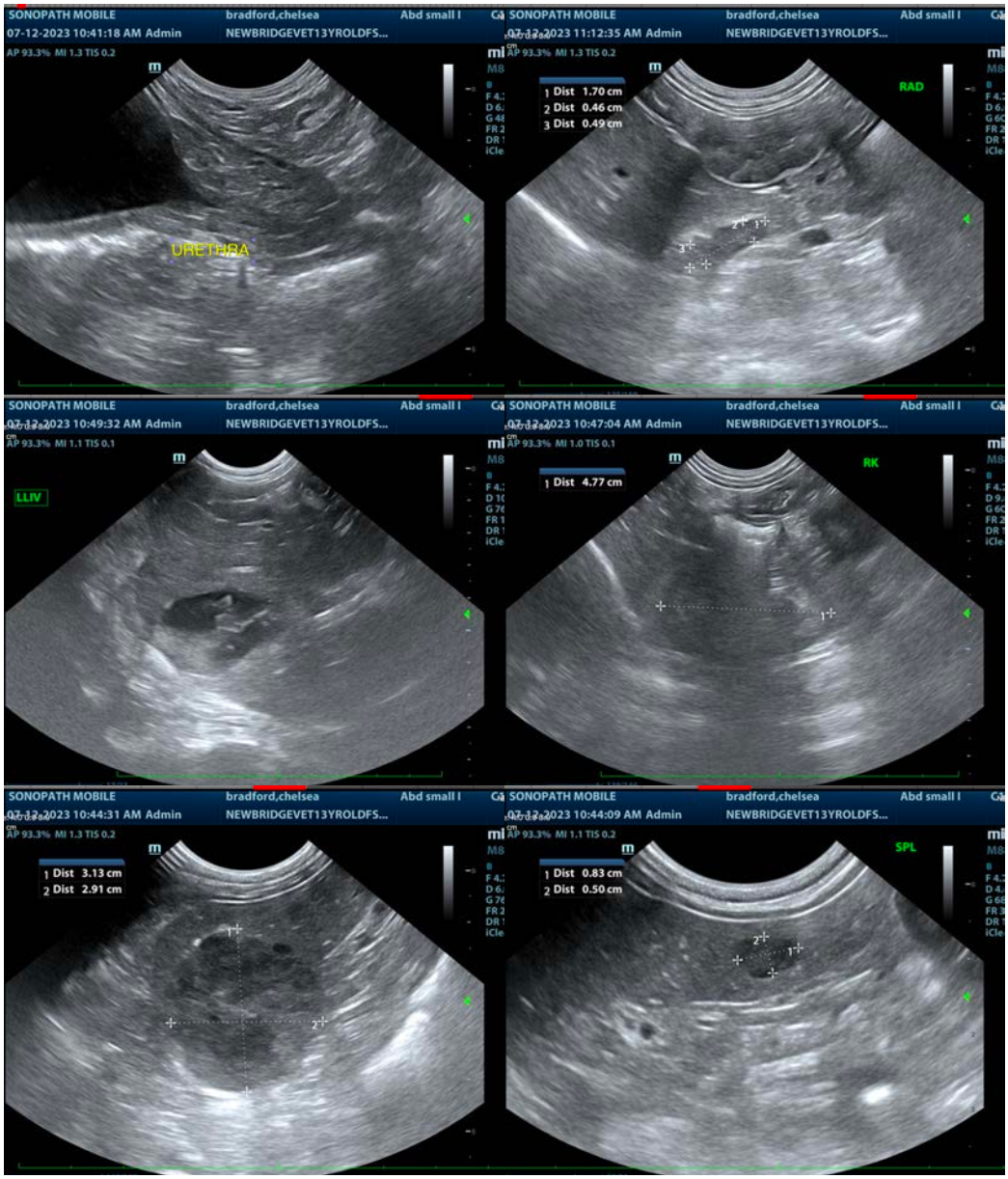
Dr. Abina Glennon

INVOICE

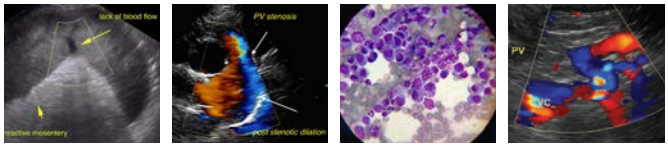
43949

DATE

7/12/23



SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™



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

PATIENT

Chelsea Bradford

SPECIES

Canine

BREED

Pug

SEX

Spayed Female

AGE

13 Years

WEIGHT

19 Pounds

INTERPRETED BY

Beth Johnson, DVM DACVIM

IMAGING PERFORMED BY

Kelly Vazquez

HOSPITAL NAME

New Bridge VP

REFERRING VET

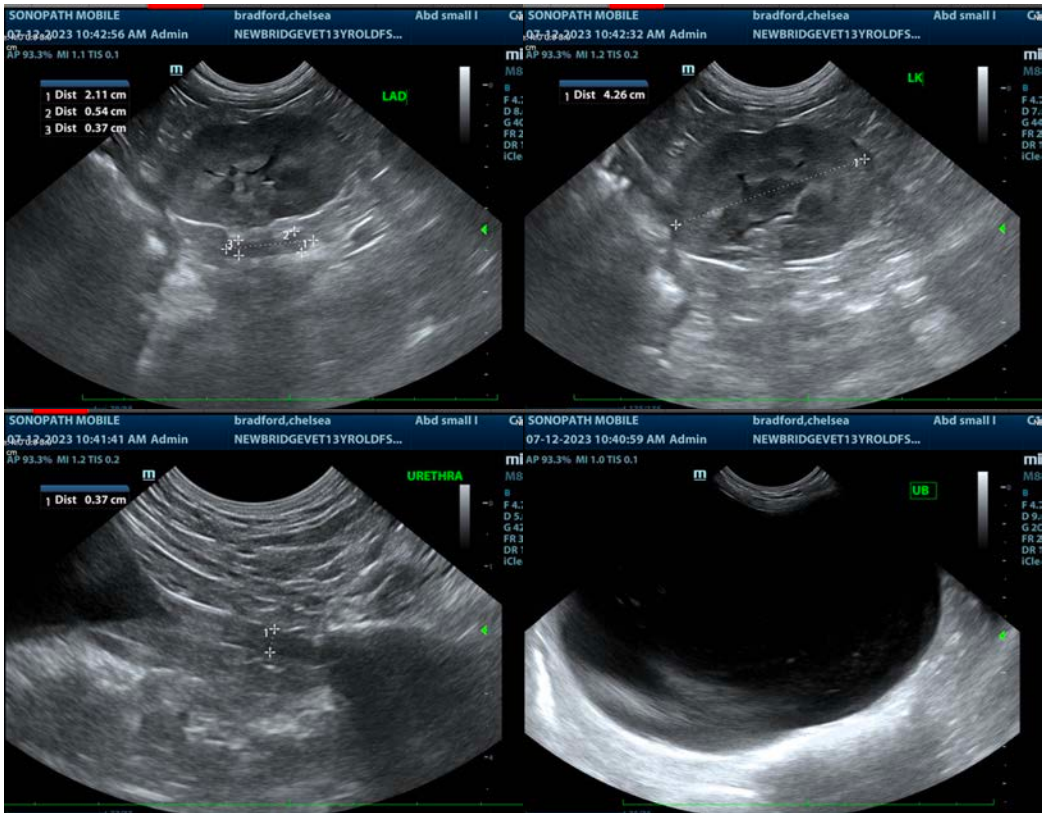
Dr. Abina Glennon

INVOICE

43949

DATE

7/12/23



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