

**DATE PRESENTING CLINICAL SIGNS**

2/23/23 Patient was ADR. Abdominal mass diagnosed on radiographs.

**PATIENT**

Daphne Cremen  
 Current Medications: None at this time.  
 Radiographs: Abdominal mass.  
 Date of Previous IntraPet Ultrasound: No previous.  
 Sedation: Not required to complete full diagnostic ultrasound.  
 Stat Report: Not requested.

**SPECIES**

Canine  
 Imaging Performed By: Rachel Brillhart, RDMS.

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN****BREED**

English Bulldog

**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.

**SEX**

Spayed Female

The right kidney is overall normal in size (6.69 cm) and shape with smooth peripheral margination. A normal 1:3 cortex to medulla ratio is maintained. The medulla and cortex 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. The kidney is surrounded by enhanced hyperechoic fat and a scant amount of anechoic free fluid.

**AGE**

10/15/13

**WEIGHT**

61.7 Pounds

In the area of the left kidney, there is a large 15.0 cm x 7.5 cm cystic structure with septations and very minimal tissue, consistent with what is left of a cystic left kidney. The kidney is surrounded by enhanced hyperechoic fat and a scant amount of anechoic free fluid.

**INTERPRETED BY**

Beth Johnson, DVM  
 DACVIM

**Adrenal Glands**

The right adrenal gland is normal in size (2.69 cm long x 0.96 cm at the cranial pole and 0.73 cm at the caudal pole), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

**HOSPITAL NAME**

Madonna Vet Clinic

The left adrenal gland is unable to be well visualized in these images due to concurrent pathology from the mass in the area.

**REFERRING VET**

Dr. Brockett

**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.

**INVOICE**

45465

**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.

### ***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 a scant amount of anechoic free fluid as well as enhanced mesenteric/retroperitoneal fat around both kidneys.

There is no apparent lymphadenopathy noted in these images.

## **ULTRASONOGRAPHIC FINDINGS**

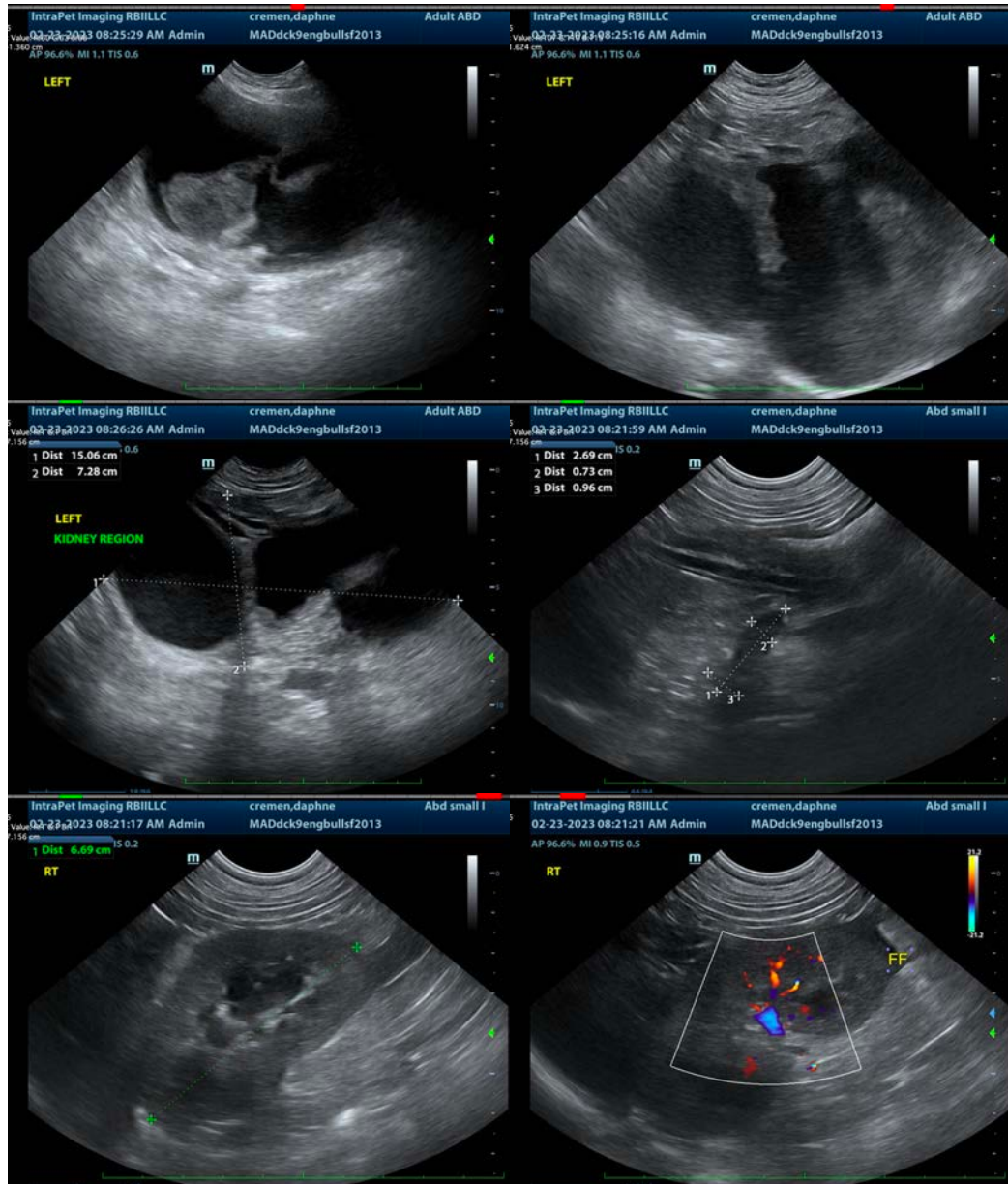
- Age related changes with cortical cysts in the right kidney
- In the area of the left kidney, all that remains is a cystic structure, which may be the result of cortical cysts that have resulted in atrophy of normal renal cortex, potentially complicated cysts or even abscesses. Additionally, a hydronephrosed kidney with no remaining normal architecture is possible. Infiltrative neoplasia is possible but considered less likely. Given the perirenal changes consistent with inflammation, a concurrent infection versus other resulting in focal peritonitis is considered likely.

## **INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

Further evaluation of kidney function is recommended, beginning with 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 ration is recommended.

Additionally, if patient's coagulation status is appropriate, fine needle aspirate of the left kidney/cystic structure is recommended for both cytology as well as culture and sensitivity.

Ultimately, even large renal cysts that have resulted in renal cortical atrophy can remain subclinical if the concurrent kidney is fully functioning. However, given this patient's reported discomfort as well as inflammatory changes surrounding the structure, an exploratory laparotomy for planned left nephrectomy may be warranted.



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