



PATIENT	PRESENTING CLINICAL SIGNS
Zoey Dinces	Chronic cystitis. Current meds: Clavamox (5/7/22) Abnormal PE/Chem/CBC/UA Results: USG 1.035, Crystalluria (amm.mg phosphate/Ca++Ox)
SPECIES	ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN
Canine	Urinary System
BREED	The urinary bladder is adequately, but not fully distended with anechoic contents. The wall is smooth, but very mildly irregular in the region of the apex. The latter may be due to the bladder not being well distended, however, an underlying cystitis cannot be excluded. No abnormalities are noted with the trigone or the proximal 3-4 cm of the urethra, and there is no evidence of sediment, cystoliths, polyps or a mass. Note, the urinary bladder was more distended by the end of the exam, at which time the wall of the apex was smooth.
Pug	
SEX	Uterus
Spayed Female	A very small portion of the uterine stump is visualized; no abnormalities noted.
AGE	Kidneys
7 Years	The left kidney measures 4.27 cm. The capsule is smooth. A very mild loss of the normal definition of the cortico-medullary junction is present. Very mild mineralization of the diverticulae and pelvis are present, without evidence of nephroliths or pyelectasia. An accumulation of intrapelvic fat is noted. Blood flow is within normal limits. The surrounding mesentery is not hyperechoic.
WEIGHT	The right kidney measures 4.75 cm. Findings are similar to the left kidney.
27.4 Pounds	
INTERPRETED BY	Aortic bifurcation/trifurcation
Lisa Carioto, DVM, DVSc, Diplomate ACVIM	No abnormalities observed.
IMAGING PERFORMED BY	Adrenal Glands
Shari Reffi, CVT	The left adrenal gland measures 0.46 cm at the cranial pole, 0.31 cm at the caudal pole and 1.51 cm in length. No abnormalities are noted with the gland's overall architecture, echogenicity or echotexture. The phrenico-abdominal vein and surrounding vasculature and mesentery are unremarkable.
HOSPITAL NAME	The right adrenal gland measures 0.73 cm at the cranial pole, 0.45 cm at the caudal pole, and 1.84 cm in length. The cranial pole is enlarged, "plump" an somewhat nodular in shape. However a mass is not observed. No abnormalities are noted with the gland's echogenicity or echotexture. The phrenico-abdominal vein and surrounding vasculature and mesentery are unremarkable.
Ridge Road AH	
REFERRING VET	Spleen
Dr. Pathak	The spleen is within normal limits in size, architecture, echotexture, and echogenicity. The capsule is smooth. No abnormalities are observed with its vasculature, i.e. congestion and thrombi are not identified.
INVOICE	Liver
38077	There are no obvious signs of hepatomegaly and its borders are smooth and sharp. The liver's echotexture is homogeneous, but mildly hyperechoic (i.e. it is isoechoic to the spleen). Focal lesions are not visualized. No abnormalities are observed with the hepatic vessels.
DATE	
5/27/22	



PATIENT

Zoey Dinces

The gallbladder wall is within normal limits in thickness and echogenicity. A trivial amount of echogenic material is present within the GB. The portions of the cystic and/or common bile ducts observed are not dilated or tortuous, i.e. there are no signs of an obstruction.

SPECIES

Canine

Gastrointestinal

The gastric wall is within normal limits in thickness and the wall layers are well defined. No obvious abnormalities are observed with its peristalsis.

BREED

Pug

The small intestinal wall thickness, including the duodenum, is within normal limits and the definition of the wall layers is preserved. No abnormalities are observed with the ileocecal colic junction. Abnormally dilated loops of bowel are not observed.

SEX

Spayed Female

The colonic wall is not thickened and mural detail is considered normal. Semi-soft stools are present in the colon.

There are no obvious signs of a mass, foreign body, infiltrative disease or an obstruction in the gastrointestinal tract.

AGE

7 Years

Pancreas

No overt abnormalities are observed with the echogenicity or echotexture of either limb. There is no evidence of hyperechogenicity of the surrounding mesentery, i.e., signs of active pancreatitis are not present.

WEIGHT

27.4 Pounds

Other

Lymph nodes

No abnormalities are observed

Abdominal effusion is not visualized.

Heart

A brief video clip of the heart was submitted. Pericardial and pleural effusion are not identified. There is no evidence of a mass is not observed on evaluation of the right atrium or auricle.

INTERPRETED BY

Lisa Carioto, DVM,
DVSc, Diplomate
ACVIM

IMAGING PERFORMED BY

Shari Reffi, CVT

HOSPITAL NAME

Ridge Road AH

REFERRING VET

Dr. Pathak

INVOICE

38077

DATE

5/27/22

ULTRASONOGRAPHIC FINDINGS

- **Urinary bladder:** There are no abnormalities to suggest a current urinary tract infection. Cystoliths, polyps and a mass are not evident. The urethra and proximal 3-4 centimeters of the proximal urethra are within normal limits.
- **Kidneys:** The very mild renal changes present are suggestive of age related degeneration. Mild mineralization may occur secondary to diet, as well as age related changes.
- **Adrenal glands:** The cranial pole of the right gland is more "plump", mildly enlarged and somewhat nodular for a dog of Zoey's stature. Mild adrenomegaly may occur secondary to adrenal hyperplasia due to stress or chronic illness, as well as a benign adenoma. There are no signs of a mass, therefore, neoplasia is considered much less likely. Emerging pituitary dependent HAC cannot be excluded. Sonographic results should be correlated with clinical signs, i.e., further diagnostics are not necessary if a patient is not demonstrating clinical signs of HAC.



PATIENT

Zoey Dinces

- **Liver:** A vacuolar hepatopathy may explain the diffuse hyperechogenicity. Cholestasis is also possible. Differential diagnoses, such as hepatitis, cholangitis/cholangiohepatitis are considered unlikely.

SPECIES

Canine

- **Gallbladder:** Trivial amount of sludge. Most likely clinically insignificant, however, gastroesophageal reflux disease (GERD), may occur in some patients. Obtaining a history regarding signs of GERD from the client is suggested. Treatment with an anti-acid, proton pump inhibitor may be required depending on the patient's history. Signs of suppurative cholecystitis are not apparent.

BREED

Pug

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Obtaining a history regarding signs of GERD from the client is suggested. Treatment with an anti-acid, proton pump inhibitor may be required depending on the patient's history.

SEX

Spayed Female

Further suggestions include

Continuing treatment with amoxicillin-clavulanic acid is for a total of 4 to 6 weeks in case an underlying polyploid cystitis was present.

AGE

7 Years

Evaluation of Zoey's diet (s/o index is suggested)

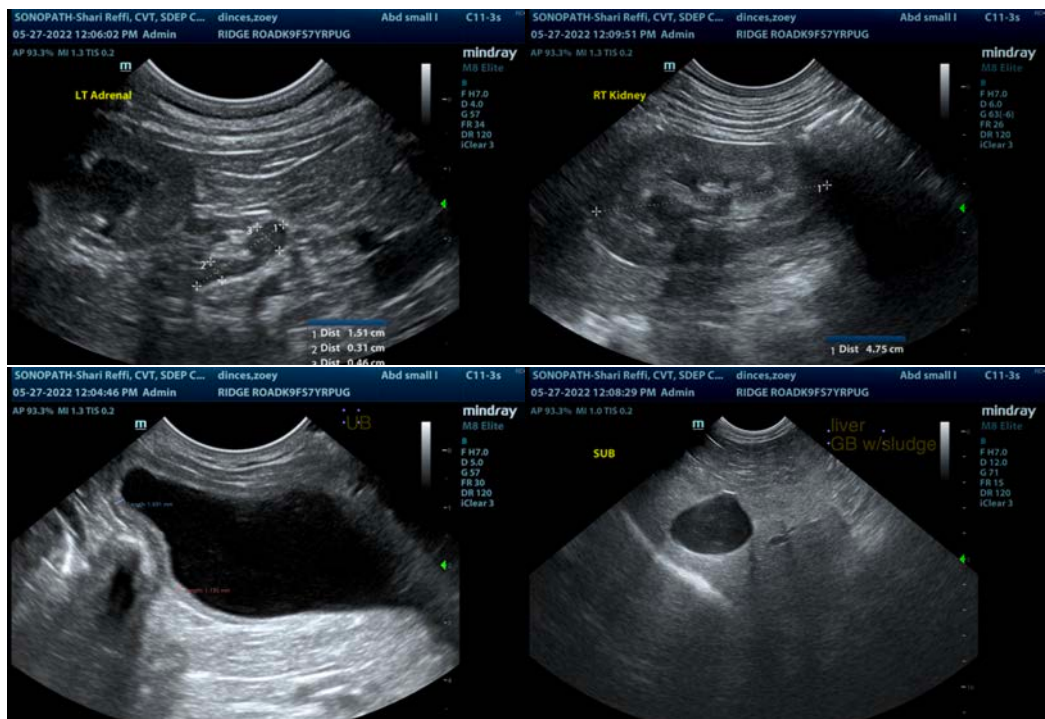
WEIGHT

27.4 Pounds

Evaluation of the conformation of Zoey's vulva and perivulvar region. Basic hygiene should be pursued on a daily basis with chlorhexidine 0.025-0.05%, rinsed with luke warm water, and ensuring the area is kept dry to decrease risk of infection.

INTERPRETED BY

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PATIENT

Zoey Dinces

SPECIES

Canine

BREED

Pug

SEX

Spayed Female

AGE

7 Years

WEIGHT

27.4 Pounds

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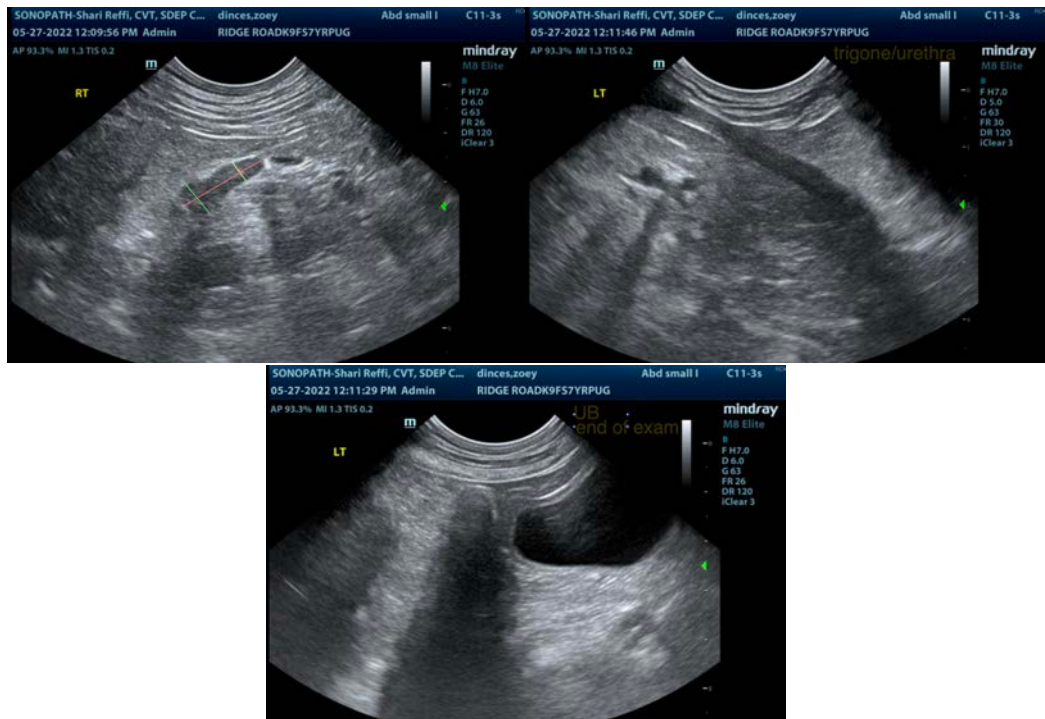
Dr. Pathak

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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.

Lisa Carioto, DVM, DVSc, Diplomate ACVIM

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