



**PATIENT PRESENTING CLINICAL SIGNS**

Dixie Gerber Inconsistently lethargic having urinary accidents occasionally. Urinalysis shows bacteruria. USG 1.047 BUN 43, Creat 2.9.

**SPECIES ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

Canine *Urinary System*

**BREED** The urinary bladder is mildly to moderately distended. The wall in the region of the apex is slightly thickened (0.37 cm) and irregular. The wall tapers to a normal thickness as it extends toward the cystourethral junction. A scant amount of suspended echogenic debris is observed within the lumen. No cystic calculi are seen. The region of the trigone and the proximal urethra, visible to a depth of 2 cm, are normal.

Havanese

**SEX**

Female, spayed

The left kidney is normal size (3.36 cm in length) with a slightly irregular shape. The cortex is variably thickened and there is moderate loss of corticomedullary distinction. 1-2 small cortical cysts are seen. Moderate pyelectasia is present (0.43 cm) in the longitudinal plane. There is no evidence of nephroliths or hydroureter. Renal vasculature is normal.

**AGE**

8/22/2007

The right kidney is normal size (3.38 cm in length); normal shape and architecture with smooth peripheral margins. The cortex is variably thickened and there is moderate loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

**WEIGHT**

14.6 lbs.

*Adrenal Glands*

**INTERPRETED BY**

Andrea Nicastro, DVM,  
Diplomate ACVIM  
(Small Animal Internal  
Medicine)

The left adrenal gland is normal size (0.62 cm at cranial pole) (0.38 cm at caudal pole) (1.64 cm in length) with a slightly prominent cranial pole. A 0.69 x 0.61 cm hyperechoic nodule is observed at the cranial aspect. The glandular echogenicity and detail at the caudal aspect are unremarkable. The phrenicoabdominal vein and surrounding vasculature are normal.

**IMAGING PERFORMED BY**

Andrea Nicastro, DVM,  
Diplomate ACVIM  
(Small Animal Internal  
Medicine)

The right adrenal gland is normal size (0.60 cm at cranial pole) (0.43 cm at caudal pole); normal shape; homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

**HOSPITAL NAME**

Flowerton AH

*Spleen*

The spleen is normal in size (0.90 cm in width at the level of the hilus). A 1.22 x 1.13 cm hypoechoic nodule/mass is observed at the craniomedial aspect. The nodule causes slight capsular expansion. The remaining peripheral margins are curvilinear. The parenchyma is subtly mottled in appearance. A few ill-defined myelolipomas are seen. Splenic vasculature appears normal with no evidence of thrombosis.

**REFERRING VET**

Dr. Randinelli

*Liver*

The liver is subjectively normal in size with normal curvilinear peripheral contours. The parenchyma is hypoechoic relative to the spleen with minor changes consistent with age-related remodeling. A few small, ill-defined hyperechoic nodules/areas are observed throughout the organ. Vascular and biliary tracts are of normal volume with no evidence of congestion. The gall bladder lumen is distended. The

**INVOICE**  
13784

**DATE**  
7/27/22



**PATIENT**

wall is normal in thickness. Luminal contents are mostly anechoic. The cystic and common bile ducts are normal/not seen.

Dixie Gerber

***Gastrointestinal***

**SPECIES**

The stomach and intestine are free of stasis and exhibit normal peristaltic activity. The gastric lumen is not distended. The gastric wall and pylorus are normal in thickness with a normal layering pattern. The pyloric outflow tract is patent. The small intestinal lumen is not dilated. The small intestinal wall thickness is normal with a normal layering pattern and appropriate mural detail. Discreet masses are not identified. The colonic wall is normal. No obstructive disease is noted.

Canine

**BREED**

Havanese

***Pancreas***

**SEX**

The region of the pancreas is isoechoic relative to surrounding omental fat. No obvious parenchymal abnormalities are observed. There is no evidence of regional inflammation or effusion.

Female, spayed

***Free Abdomen***

**AGE**

The peritoneal cavity is normal. There is no evidence of inflammation or effusion. The abdominal lymph nodes are normal/not visible.

8/22/2007

***Other***

**WEIGHT**

A brief echocardiogram reveals no evidence of pericardial effusion or obvious right atrial/auricular mass.

14.6 lbs.

**INTERPRETED BY**

Andrea Nicastro, DVM,  
Diplomate ACVIM  
(*Small Animal Internal  
Medicine*)

**ULTRASONOGRAPHIC FINDINGS**

**Primary Findings:**

- Bilateral chronic age-related renal changes. The left pyelectasia could be consistent with pyelonephritis, age-related remodeling, PU/PD (if applicable) or some combination thereof.
- The urinary bladder wall changes are suggestive of cystitis but may be somewhat artifactual due to lack of full repletion.
- The splenic nodule/mass is concerning for a neoplastic process (i.e., sarcoma, round cell tumor). However, benign change (i.e., a focus of lymphoid hyperplasia, extramedullary hematopoiesis or similar) cannot be completely excluded.

**IMAGING**

**PERFORMED BY**

Andrea Nicastro, DVM,  
Diplomate ACVIM  
(*Small Animal Internal  
Medicine*)

**HOSPITAL NAME**

Flowerton AH

**Secondary Findings:**

- The left adrenal nodule could be consistent with a benign process (i.e., nodular hyperplasia). Alternatively, an emerging tumor (i.e., adenoma, adenocarcinoma, pheochromocytoma) is possible.
- Geriatric hepatic changes with suspected minor regenerative nodular hyperplasia.

**REFERRING VET**

Dr. Randinelli

**INVOICE**

13784

**DATE**

7/27/22



**PATIENT**

Dixie Gerber

**SPECIES**

Canine

**BREED**

Havanese

**SEX**

Female, spayed

**AGE**

8/22/2007

**WEIGHT**

14.6 lbs.

**INTERPRETED BY**

Andrea Nicastro, DVM,  
Diplomate ACVIM  
(Small Animal Internal  
Medicine)

**IMAGING PERFORMED BY**

Andrea Nicastro, DVM,  
Diplomate ACVIM  
(Small Animal Internal  
Medicine)

**HOSPITAL NAME**

Flowerton AH

**REFERRING VET**

Dr. Randinelli

**INVOICE**

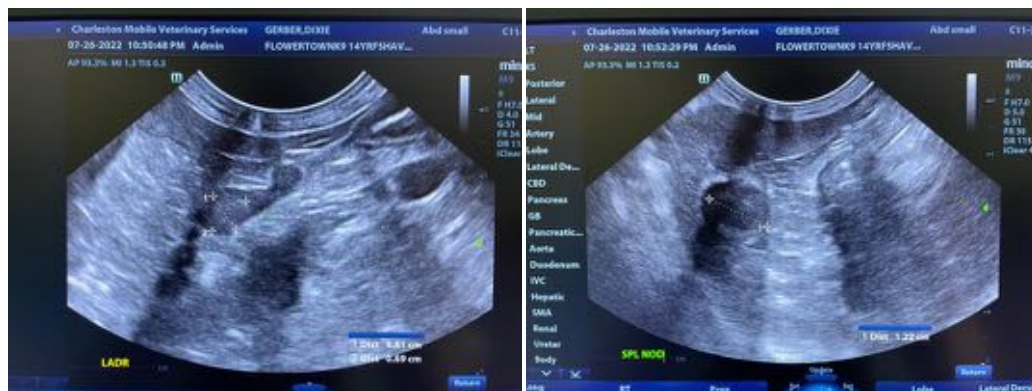
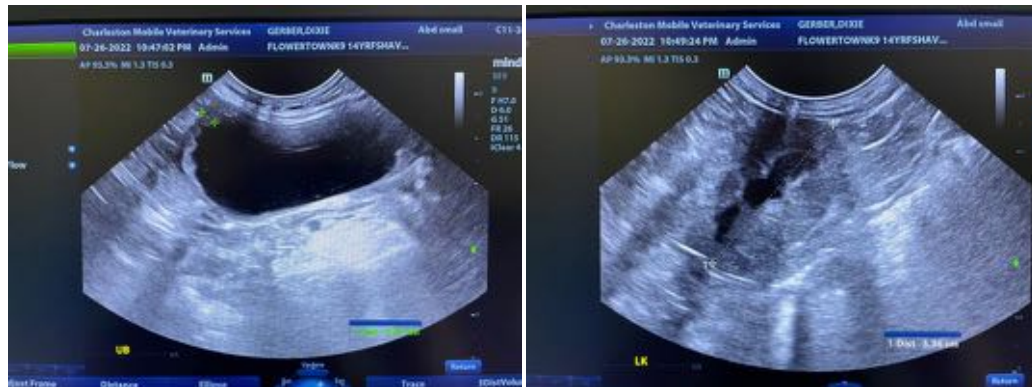
13784

**DATE**

7/27/22

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

- Given the clinical history and sonographic changes, a urine culture and sensitivity is recommended along with serial monitoring (i.e., every 3-4 months) of the patient's renal values and urine specific gravity to assess for progressive renal disease. A baseline blood pressure is also recommended along with transitioning to a prescription renal diet (if the patient will tolerate it).
- Regarding the splenic nodule/mass, unfortunately, it is not accessible for aspiration. Therefore, if an aggressive approach is desired, consider splenectomy with submission of the spleen for histopathology. Alternatively, a repeat ultrasound can be considered in 3-4 weeks to assess for progression. The left adrenal nodule can also be reevaluated at this time.





**PATIENT**

Dixie Gerber

**SPECIES**

Canine

**BREED**

Havanese

**SEX**

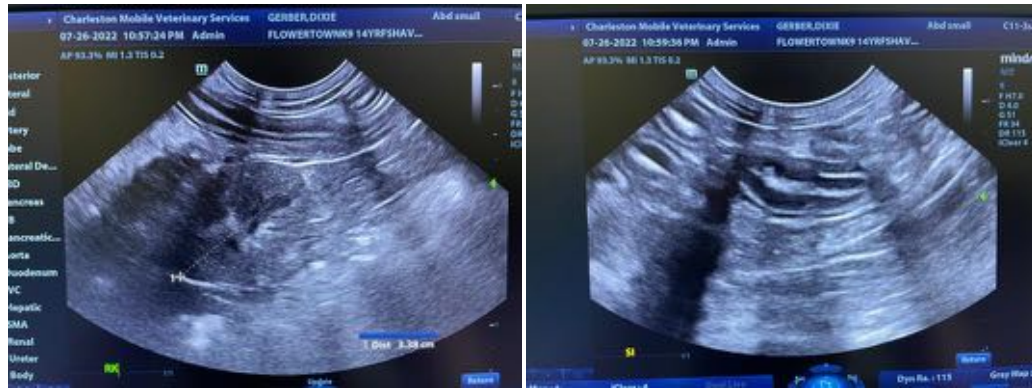
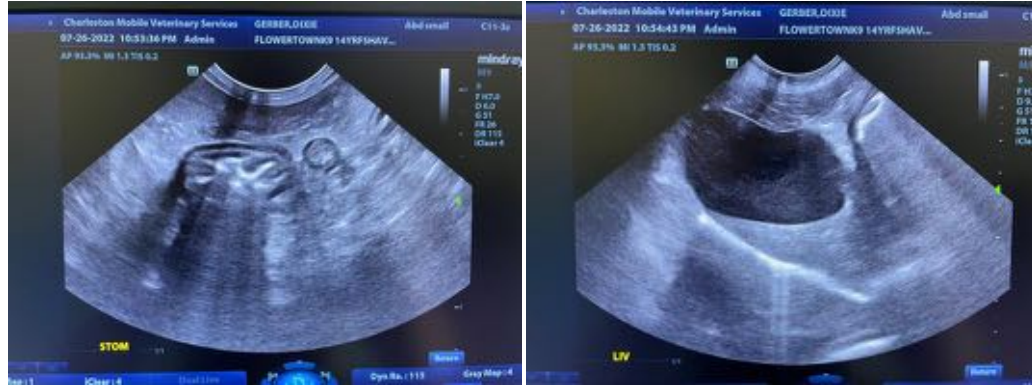
Female, spayed

**AGE**

8/22/2007

**WEIGHT**

14.6 lbs.



**INTERPRETED BY**

Andrea Nicastro, DVM,  
Diplomate ACVIM  
(Small Animal Internal  
Medicine)

**IMAGING  
PERFORMED BY**

Andrea Nicastro, DVM,  
Diplomate ACVIM  
(Small Animal Internal  
Medicine)

**HOSPITAL NAME**

Flowerton AH

**REFERRING VET**

Dr. Randinelli

**INVOICE**

13784

**DATE**

7/27/22

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.

Andrea Nicastro, MPH, DVM, Diplomate DACVIM (Small Animal Internal Medicine)  
info@SonoPath.com