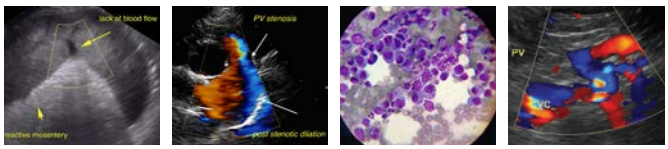
SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™



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

PATIENT

Shelby Neiger

SPECIES

Canine

BREED

Great Dane

SEX

Female

AGE

2 Years

WEIGHT

94 Pounds

INTERPRETED BY

Kathleen Sennello DVM, MS, Diplomate ACVIM (Small Animal Internal Medicine)

IMAGING PERFORMED BY

Shari Reffi, CVT

HOSPITAL NAME

Shohola Vet Hospital

REFERRING VET

Dr. Gramazio

INVOICE

42713

DATE

11/10/22

PRESENTING CLINICAL SIGNS

Vomiting, no appetite, wgt. loss, elevated kidney values. Mild regenerative anemia. No current meds. R/O Renal Dysplasia vs other

Abnormal PE/Chem/CBC/UA Results: RBC 4.66 (5.39L); HCT 37 (38.3 L); HG 11.8 (13.4L); MCV 79(76H); MCHC 31.9 (32.6L); RETIC 149 (110H); SDMA 51 (14H); CREAT 7.2 (1.5H); BUN 132 (31H); PHOS 13.9 (6.1H); CA+ 12.2 (11.8H); ANION GAP 27 (26H); TP 5.3 (5.5L); ALB 2.3 (2.7L); CK 313 (200H); Cortisol= normal; Lepto=Neg. Anaplasma=Positive. U/A-USG 1.018, 3+ Protein; ph 6, 3+ epith.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder is minimally distended with anechoic urine. The Bladder wall is diffusely mildly thickened, and the mucosa is mildly irregular. The trigone, ureteral papillae, and visible urethra (to a depth of 2cm) appear normal with no evidence of severe mucosal irregularities, masses or cystic calculi. Findings are most consistent with bacterial cystitis or lack of urine distension. Recommend urinalysis and culture.

The left kidney has a normal shape and size (7.0 cm). Overall echogenicity is hyperechoic and mildly mottled with adequate corticomedullary distinction. There is no evidence of focal perinephric inflammation or effusion, but there is a hyperechoic line between the cortex and medulla, consistent with corticomedullary rim sign. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The right kidney has a normal shape and size (6.31 cm). Overall echogenicity is hyperechoic and mildly mottled with adequate corticomedullary distinction. There is no evidence of focal perinephric inflammation or effusion, but there is a hyperechoic line between the cortex and medulla, consistent with corticomedullary rim sign. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

Adrenal Glands

The left adrenal gland is normal in size measuring 0.64 cm at the caudal pole. It is observed in its normal position cranial to the left renal artery. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

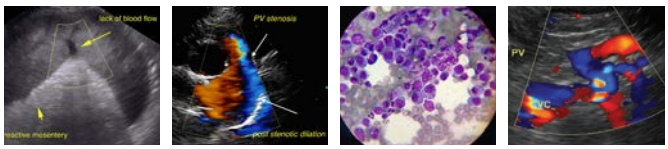
The right adrenal gland is normal in size measuring 0.88 cm at the caudal pole. It is observed in its normal position between the cranial aspect of the right kidney and the caudal vena cava. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

Spleen

The spleen is subjectively normal in size, echotexture is homogenous, and the splenic capsule is smooth with no irregularities. The blood flow through the hilus and splenic parenchyma appears normal. No focal parenchymal abnormalities are visualized.

Liver

The liver is subjectively normal in size, and echogenicity with smooth peripheral margins. The parenchyma is homogenous echotexture. The visible portions of the vasculature and biliary tract appear normal. No focal nodules or cystic lesions are observed.



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

PATIENT

Shelby Neiger

SPECIES

Canine

BREED

Great Dane

SEX

Female

AGE

2 Years

WEIGHT

94 Pounds

INTERPRETED BY

Kathleen Sennello DVM, MS, Diplomate ACVIM (Small Animal Internal Medicine)

IMAGING PERFORMED BY

Shari Reffi, CVT

HOSPITAL NAME

Shohola Vet Hospital

REFERRING VET

Dr. Gramazio

INVOICE

42713

DATE

11/10/22

The gallbladder lumen is moderately distended. The wall of the gall bladder is not thickened and has a smooth mucosal surface. Luminal contents are mild and primarily anechoic. The cystic and common bile ducts are normal/not visible.

Gastrointestinal

The stomach contains moderate fluid. It measures at a normal thickness of <0.7cm with some variability due to the presence of rugal folds. The distinction of the gastric wall layers is adequate and there is no impression of reduced peristaltic activity. No masses or focal lesions were observed.

The visualized areas of duodenum, jejunum and ileum have a relatively uniform diameter with minimal fluid distension. Wall thickness is normal. Bowel loops follow a curvilinear path with distinct wall layering maintaining the typical 1:3 muscularis:mucosa layer ratio. Jejunum wall measures 0.36 cm. Visualized peristalsis appears appropriate. There were no focal lesions consistent with obstruction or a mass effect observed.

The ileocecal junction was visualized and exhibited normal intact wall layering and is subjectively of normal thickness. Sections of colon are visualized with formed fecal material and gas shadowing distally. There is no observed focal or generalized colon wall thickening or loss of layering.

Pancreas

The pancreas is normal and isoechoic to surrounding mesentery. There is no evidence of nodules or cystic lesions. There is no evidence of regional mesenteric inflammation or fluid.

Free Abdomen

Evaluation of the peritoneal cavity did not reveal any evidence of effusion, or subjective lymphadenomegaly. The Medial iliac nodes appear normal and there was no evidence of a caudal aortic thrombus at the bifurcation. The omentum is of normal uniform echogenicity.

Other

A brief view of the heart was submitted. No significant pericardial effusion was seen.

The left ovary is visualized measuring 1.16 cm in diameter.

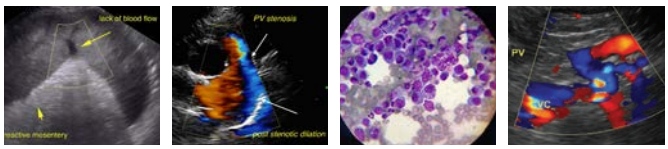
ULTRASONOGRAPHIC FINDINGS

- Subjectively thickened urinary bladder – This is likely due to inadequate filling. Recommend urinalysis and culture if not already done.
- Mildly hyperechoic kidneys with corticomedullary rim sign – This is a subjective determination. Hyperechoic kidneys can be consistent with interstitial nephritis, nephrosis, etc. Clinical significance of the corticomedullary rim sign is uncertain, can be seen in normal patients and in cases of ethylene glycol toxicity, FIP, chronic interstitial nephritis, and leptospirosis.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Overall, the kidneys appear relatively normal. They are not misshapen. There are no focal lesions visualized. They do appear slightly hyperechoic compared to the spleen, and there is mild corticomedullary rim sign evident. The significance of these changes is unclear. Biopsy of the kidneys would likely be necessary for more information.

Your initial evaluation is very good with baseline cortisol levels, Leptospirosis testing, etc. If not already done, recommend a urinalysis and culture. Recommend a urine protein to creatinine ratio and possible treatment for proteinuria. Additionally, recommend a blood pressure evaluation.



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

PATIENT

Shelby Neiger

SPECIES

Canine

BREED

Great Dane

SEX

Female

AGE

2 Years

WEIGHT

94 Pounds

INTERPRETED BY

Kathleen Sennello DVM, MS, Diplomate ACVIM (Small Animal Internal Medicine)

IMAGING PERFORMED BY

Shari Reffi, CVT

HOSPITAL NAME

Shohola Vet Hospital

REFERRING VET

Dr. Gramazio

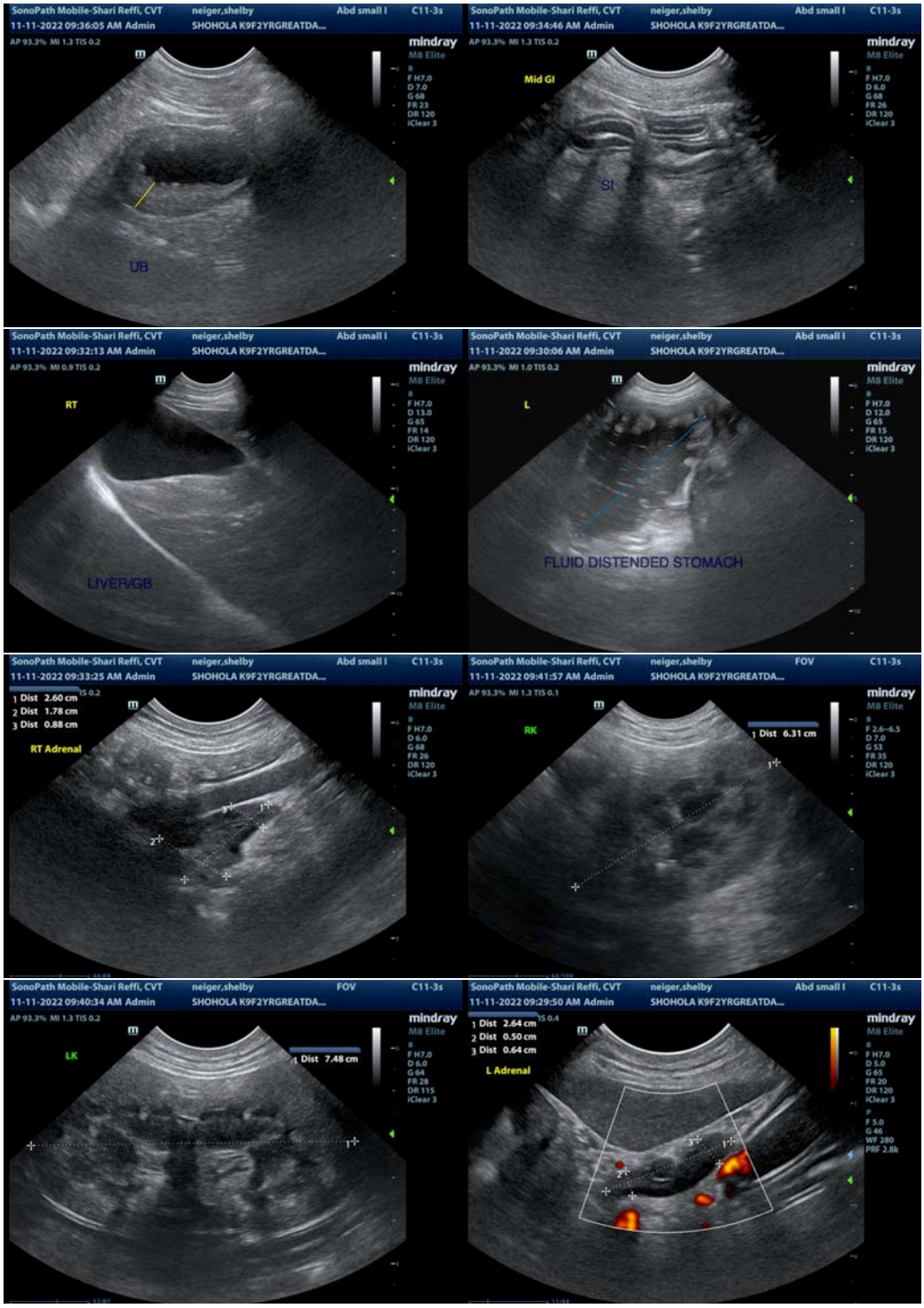
INVOICE

42713

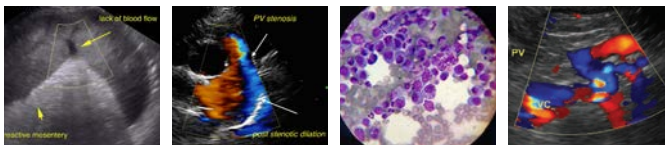
DATE

11/10/22

Unfortunately, a lack of significant ultrasonographic changes does not rule out the possibility of dysplasia. This could also be a case of end stage glomerulonephritis that now is in tubular failure. Consider any possible nephrotoxic exposures, etc.



SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™



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

PATIENT

Shelby Neiger

SPECIES

Canine

BREED

Great Dane

SEX

Female

AGE

2 Years

WEIGHT

94 Pounds

INTERPRETED BY

Kathleen Sennello DVM, MS, Diplomate ACVIM (Small Animal Internal Medicine)

IMAGING PERFORMED BY

Shari Reffi, CVT

HOSPITAL NAME

Shohola Vet Hospital

REFERRING VET

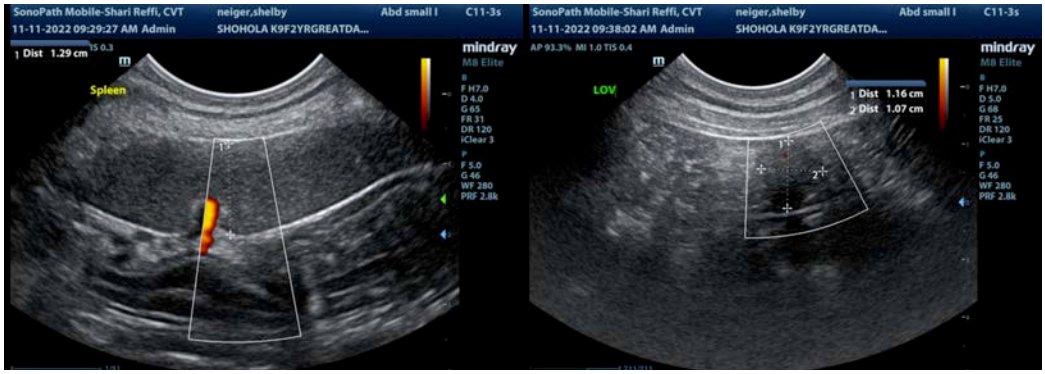
Dr. Gramazio

INVOICE

42713

DATE

11/10/22



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.

Kathleen Sennello DVM,MS, Diplomate ACVIM (Small animal Internal Medicine)

kathleen.sennello@sonopath.com