



**PATIENT**

Gracie Zaccario

**SPECIES**

Canine

**BREED**

Cocker Spaniel/Poodle

**SEX**

Spayed Female

**AGE**

12 Years

**WEIGHT**

22 Pounds

**INTERPRETED BY**

Eric Lindquist, DMV  
DABVP, Cert. IVUSS

**IMAGING PERFORMED BY**

Gabriel

**HOSPITAL NAME**

Central Jersey AH

**REFERRING VET**

Gabriel

**INVOICE**

17604

**DATE**

10/7/22

**PRESENTING CLINICAL SIGNS**

History: has hx of diabetes and taking vetsulin 8 unites twice daily her blood glucose flactuate alot from too high to normal eating , drinking normal no v/d/c/s grade 3 heart murmur

Abnormal PE/Chem/CBC/UA Results: most recent blood work this week shows the following fructosamine ( 948 ) alt (389) , alp (627), blood glucose ( 227). tbil ( 0.4) cholestrol(2143) , triglyceride(3382) u/a : 2 + glucose acth : pending

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**Urinary System**

The **urinary bladder** presented a relatively uniform thickening of the cranioventral and craniodorsal mucosae with moderate micropolypoid mucosal changes without involvement of the submucosae. The urine presented some echogenicity consistent with suspended debris. No evidence of urethral pathology was present. This presentation is most consistent with chronic cystitis. Technically transitional cell carcinoma cannot be ruled out without histopathological review but is not overtly suspected based on this pattern. Cystocentesis and urine culture +/- pathological review of urine cytology would be warranted. No calculi were present at this time. A minimal amount of urine was present at the time of the sonogram.

The **kidneys** were normal in size and contour; however, a minor hyperechoic ring was noted at the corticomedullary junction. This is a moderate change, consistent with diabetic nephropathy. This is likely from glucosuria. However, assessment for proteinuria is also warranted. This is an idiopathic finding, but an expected finding in diabetic patients. The left kidney measured 4.63 cm. The right kidney measured 4.63 cm.

**Adrenal Glands**

The **left adrenal gland** was subnormal in size, measuring approximately 4.0 mm.

The **right adrenal gland** was unremarkable, uniform, measuring approximately 5.0 mm.

**Spleen**

The **spleen** was normal size and relatively normal contour with minor multifocal hyperechoic areas of mineralization. This is a benign change; however, can be related to Cushing's disease or other endocrinopathies.

**Liver**

The **liver** was diffusely hyperechoic to the falciform fat with occasional hypoechoic, non-disruptive nodular change. The liver revealed generalized enlargement. The gallbladder was unremarkable. There is no suspicion of neoplasia; however, diffuse disease is present. Bile acid profile would be ideal as well as FNA. This is a moderate change. Occasional hypoechoic nondisruptive nodular changes were noted. The hepatic veins appeared mildly dilated.

**Gastrointestinal**



**PATIENT**

Gracie Zaccario

The **gastric** wall was thickened with empty lumen. No evidence of foreign body. Curvilinear patterns were maintained yet mucosal hypertrophy was evident. The small intestine and colon were unremarkable.

**SPECIES**

Canine

***Pancreas***

The base and limbs of the **pancreas** were observed to be largely isoechoic to surrounding omental fat. Some parenchymal remodeling, however, with mild deviation from curvilinear normalcy was observed. Pancreatic duct and capsular irregularities were present consistent with age related changes. If pain upon imaging (+ Murphy sign) was present or if the patient is focally painful in subxyphoid palpation then low-grade smoldering chronic pancreatitis should be suspected. No evidence of specific disease.

**BREED**

Cocker Spaniel/Poodle

**SEX**

Spayed Female

- Diabetic nephropathy
- Diabetic hepatopathy and mildly dilated hepatic veins
- Subjectively thickened stomach- underlying gastritis is suspected
- Chronic cystitis bladder pattern- underlying UTI is suspected
- Subnormal left adrenal gland size
- Age-related pancreatic changes
- Mineralized spleen

**AGE**

12 Years

**WEIGHT**

22 Pounds

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

GI protectant protocol and full urinary work up indicated. Chest radiographs +/- echocardiogram to assess for any causes of passive congestion indicated.

**INTERPRETED BY**

Eric Lindquist, DMV  
DABVP, Cert. IVUSS

Potential Causes of Diabetic Dysregulation

This is a suggestive checkoff list when faced with an unregulated diabetic patient:

UTI

**IMAGING PERFORMED BY**

Gabriel

Dietary indiscretion/intolerance

Pancreatitis

Hyperthyroidism/hypothyroidism

**HOSPITAL NAME**

Central Jersey AH

Exogenous steroids (including topical eye meds)

Cushing's

Acromegaly

**REFERRING VET**

Gabriel

Owner compliance

Insulin quality issues

**INVOICE**

17604

Antibodies to insulin

Underlying Neoplasia

**DATE**

10/7/22



**PATIENT**

Gracie Zaccario

**SPECIES**

Canine

**BREED**

Cocker Spaniel/Poodle

**SEX**

Spayed Female

**AGE**

12 Years

**WEIGHT**

22 Pounds

**INTERPRETED BY**

Eric Lindquist, DMV  
DABVP, Cert. IVUSS

**IMAGING PERFORMED BY**

Gabriel

**HOSPITAL NAME**

Central Jersey AH

**REFERRING VET**

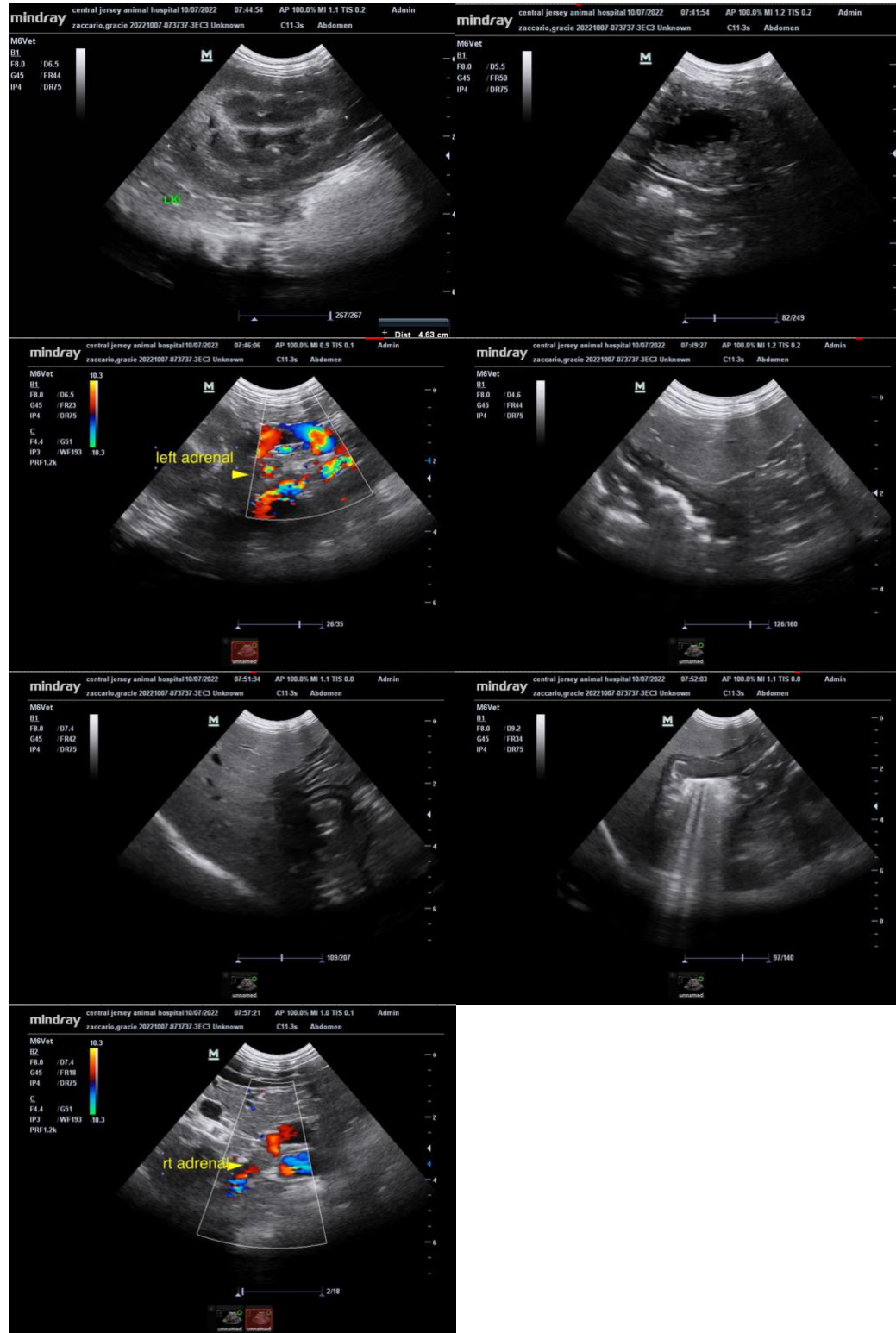
Gabriel

**INVOICE**

17604

**DATE**

10/7/22



The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not



**PATIENT**

**visible in the image/video clips provided.**

Gracie Zaccario

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.

**SPECIES**

Canine

**Eric Lindquist**, DMV, DABVP, Cert. IVUSS, CEO of SonoPath.com  
info@SonoPath.com

**BREED**

Cocker Spaniel/Poodle

**SEX**

Spayed Female

**AGE**

12 Years

**WEIGHT**

22 Pounds

**INTERPRETED BY**

Eric Lindquist, DMV  
DABVP, Cert. IVUSS

**IMAGING  
PERFORMED BY**

Gabriel

**HOSPITAL NAME**

Central Jersey AH

**REFERRING VET**

Gabriel

**INVOICE**

17604

**DATE**

10/7/22