



**PATIENT**

Stella Billingsley

**SPECIES**

Canine

**BREED**

Brussels Griffon

**SEX**

Female

**AGE**

13 Years 2 Months

**WEIGHT**

7.16 Pounds

**INTERPRETED BY**

Beth Johnson, DVM  
DACVIM

**IMAGING PERFORMED BY**

Denise Bruno, LVT,  
RDMS

**HOSPITAL NAME**

Brooklyn Heights VH

**REFERRING VET**

Dr. Thomson

**INVOICE**

41990

**DATE**

10/11/22

**PRESENTING CLINICAL SIGNS**

Intact female. Hx paralysis hind limbs, inappetence, pancreatitis. Labs + Radiographs attached.

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**Urinary System**

Urinary bladder is mildly subjectively overdistended. It has a normal uniform wall thickness. Contents include primarily anechoic fluid with occasional echogenic non-shadowing debris, most consistent with exfoliated cells, mucous and/or small blood clots. Additionally, there is mineral/sand debris, potentially very small cystoliths, both suspended and settled along the dependent wall. Both sterile inflammation as well as urinary tract infection can also present with echogenic debris. No masses or cystoliths are observed. The trigone and visible pelvic urethra are normal in thickness with a smooth mucosal surface.

The right kidney is normal in size (4.04 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia or infarcts observed. Non-obstructive areas of mineralization/nephroliths are noted.

The left kidney is normal in size (3.95 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence infarcts observed. Non-obstructive areas of mineralization/nephroliths are noted. Very mild pyelectasia is noted.

**Adrenal Glands**

Adrenal glands are small (flattened contour). Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal. The left adrenal gland measures 1.8 cm long x 0.30 cm at the cranial pole and 0.40 cm at the caudal pole. The right adrenal gland measures 1.6 cm long x 0.50 cm at the cranial pole and 0.50 cm at the caudal pole.

**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.

**Liver**

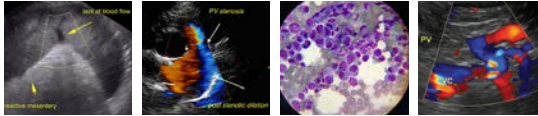
The liver is subjectively normal in size with normal smooth curvilinear peripheral contour. Parenchyma is appropriately hypoechoic to the spleen in echogenicity and appropriately mildly coarse and homogenous in echotexture. No focal lesions are observed. Visible vasculature and biliary tree appear normal without distension or congestion.

Gallbladder is moderately distended with anechoic bile as well as suspended and gravity dependent echogenic debris. The wall is smooth without visible thickening. There is no evidence of cystic or CBD dilation. There is no evidence of effusion or inflammation.

**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



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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 no evidence of free peritoneal effusion noted in these images.

There is no apparent lymphadenopathy noted in these images.

A small follicular cyst is present in the left ovary, and mildly thick hyperechoic, irregular uterine lining. Rule out normal patient variant versus endometrial hyperplasia versus other.

**PRIMARY FINDINGS**

- **Flat adrenal glands** – This can be a normal patient variant and/or a sign of exogenous cortisol administration. If exogenous steroids are not being administered, hypoadrenocorticism (either relative or absolute) should be considered.
- Urinary bladder debris including mineral/sand debris and potentially very small cystoliths
- **Full stomach (see description above)** – This finding combined with the small intestinal findings is most consistent with normal post-prandial abdomen.

**SECONDARY FINDINGS**

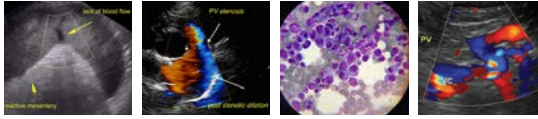
- Non-obstructive nephrolithiasis bilaterally
- **Gallbladder debris** - Cholecystic debris is of unknown clinical significance. It can be seen with biliary stasis from fasting or illness. Cholecystic debris is not necessarily related to hepatobiliary disease. Echogenic bile is most commonly an incidental finding in dogs and should be interpreted in combination with clinical signs such as nausea, inappetence, cranial abdominal discomfort and/or laboratory changes such as increased ALP and/or increased Tbili.
- Mildly thick uterine lining

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

A sterile urine culture is recommended, given the bacteriuria and proteinuria present in the reported urinalysis. If the culture is negative and protein is present in the urine, a urine protein to creatinine ratio to better quantify the proteinuria is recommended.

A baseline cortisol is recommended. If baseline cortisol is less than 2, a full ACTH stimulation test is recommended to rule out hypoadrenocorticism.

Depending on urine culture and cortisol results, if an answer for this patient's decreased appetite is not found, next recommended steps include testing for Leptospirosis (given the mildly increased ALT), as well as a gastrointestinal malabsorption panel (including cobalamin, folate, TLI and PLI) to Texas A&M GI Laboratory for further evaluation of GI and pancreatic function.



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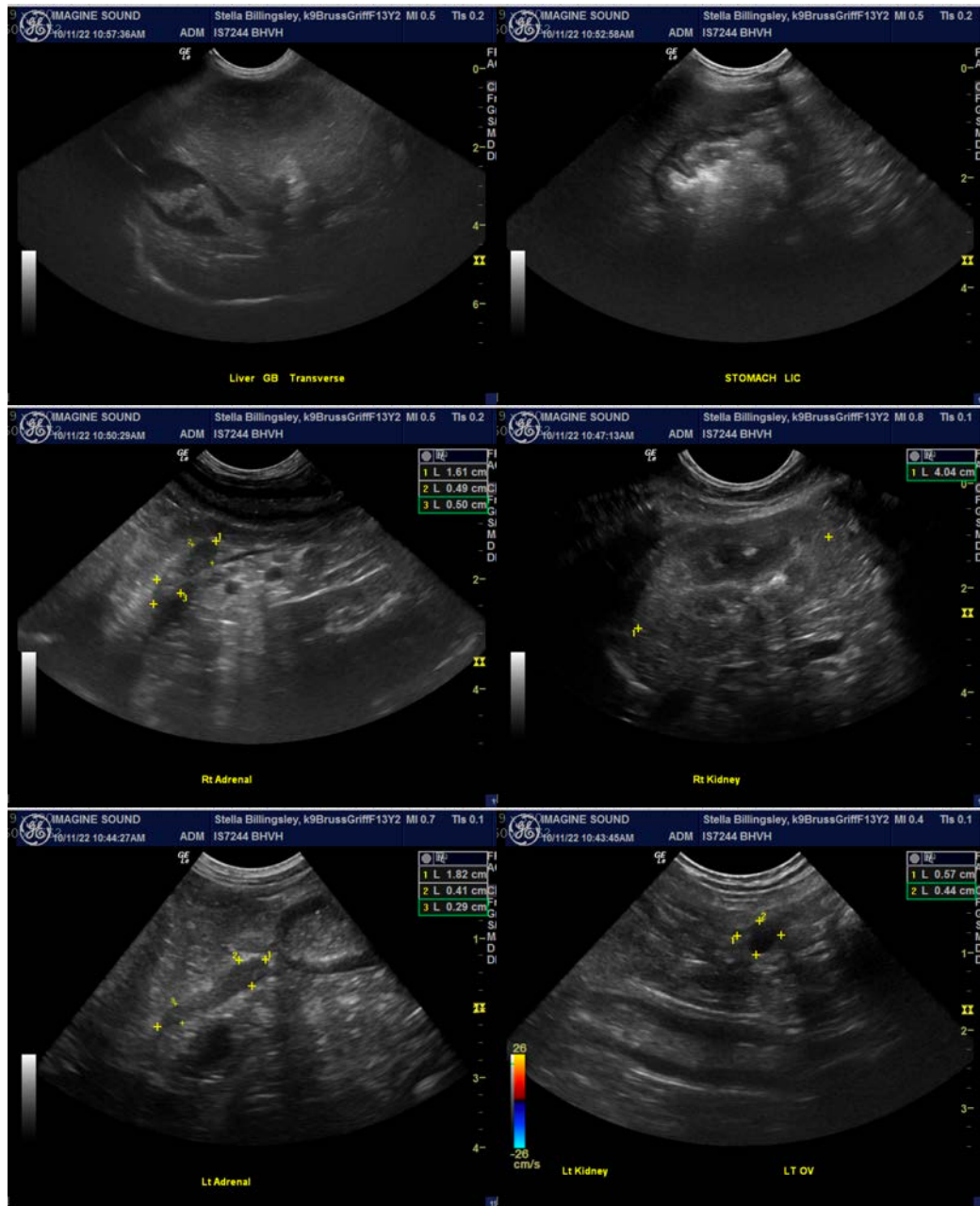
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In the meantime, supportive/symptomatic medical management of the inappetence is recommended with an antiemetic, gastroprotectants, and an appetite stimulant, as well as potentially a bland, easy to digest diet to be used on a trial-and-error basis. Empirical deworming with a 5-day course of Panacur is also recommended.

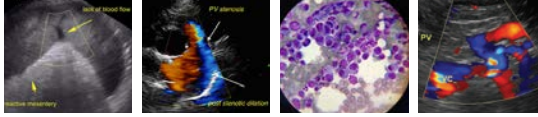


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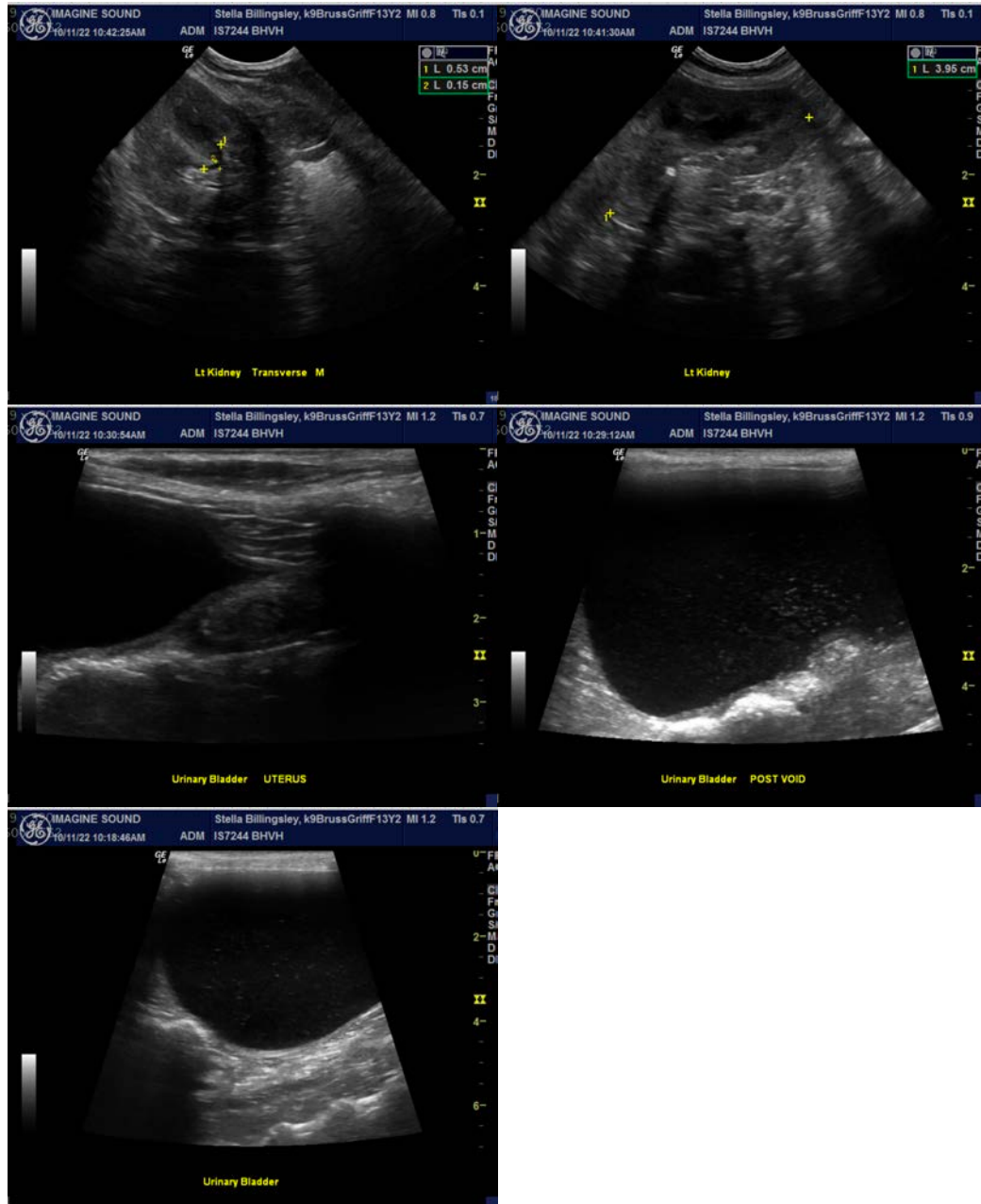
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

**Beth Johnson, DVM, DACVIM**  
Beth.Johnson@sonopath.com