

**DATE PRESENTING CLINICAL SIGNS**

4/12/22

Presented 4/7/22 for blood in urine, urinating inappropriately and diarrhea.

**PATIENT**

Current Medications: Meds sent home 4/7/22: Rimadyl 75mg Caplet

Instructions: Give 1 caplet every 12 hours for 4 days, Metronidazole 500mg Tablet Instructions: Give 1 tablet every 12 hours for 7 days

Ellie Grave

**SPECIES**

Lab Results: Labs done 4/7/22: Cbc/chem ALKP 324 (normal range 23-212), CHOL 397 (normal range 110-320), HGB 19.3 (normal range 12-18), MCH 25 (normal range 19.5-24.5), 4 DX Negative. UA - Yellow with strip of blood clots; Cloudy; Free catch: SG 1.036; Protein 300; pH 6.5; Blood Large; RBC 2+; WBC 2+; Crystals occ crystal fragments; occ epi cells.

Canine

Radiographs: gas in stomach, gas and ingesta through small intestines, stool and gas in colon, no overt obstructive pattern, possible gallstones/grit in gall bladder vs ingesta/material at pylorus, splenic enlargement, mild liver enlargement.

**BREED**

Date of Previous IntraPet Ultrasound: No previous.

Pitbull

Sedation: Torbugesic IV.

Stat Report: Not requested.

**SEX**

Imaging Performed By: Stephanie Pearce RCS, RVT.

Female, spayed

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN****AGE****Urinary System**

1/3/2012

The urinary bladder is mildly distended. The wall is diffusely thickened (up to 1.71 cm) and irregular with several finger like projections at the apex. A moderate amount of echogenic debris is observed within the lumen along with a small amount of gravity-dependent sand, which extends into the proximal urethra. A few tiny cystic calculi are also suspected. The region of the trigone and the proximal urethra walls are normal.

**WEIGHT**

79 lbs.

The left kidney is normal size (6.16 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

**INTERPRETED BY**

The right kidney is normal size (6.86 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

Andrea Nicastro, DVM,  
Diplomate ACVIM  
(Small Animal Internal  
Medicine)**HOSPITAL NAME****Adrenal Glands**

The left adrenal gland is normal size (0.64 cm at cranial pole) (0.78 cm at caudal pole) (3.13 cm in length); 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.

Banfield White Marsh

**REFERRING VET**

The right adrenal gland is normal size (0.58 cm at cranial pole) (0.66 cm at caudal pole) (2.95 cm in length); 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.

Dr. Gutwillig

**INVOICE**

13190

**Spleen**

The spleen is normal in size (2.10 cm in width at the level of the hilus) with a normal capsular contour. There is appropriate echogenicity and echotexture. No focal lesions are observed. Splenic vasculature is normal.

**Liver**

The liver is subjectively prominent in size with swollen curvilinear peripheral contours. The parenchyma is isoechoic relative to the spleen and exhibits mild heterogeneity. No distinct focal lesions are observed. A few intrahepatic stones are visualized. Hepatic vasculature is of normal volume with no evidence of

congestion. The gall bladder lumen is moderately distended. The wall is thin and smooth. A small to moderate amount of aggregated echogenic to mineralized debris/sand is observed within the lumen. The cystic and common bile ducts are normal/not seen.

### ***Gastrointestinal***

The gastric lumen is distended with ingesta. The gastric wall is normal in thickness with a normal layering pattern. 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.

### ***Pancreas***

A portion of the pancreas is obscured by the gastric distention. In the visualized portions, no obvious abnormalities are seen.

### ***Free Abdomen***

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

### ***Other***

In the left cranial quadrant, a 1.50 cm hyperechoic nodule is observed adjacent to the lateral aspect of the spleen.

## **ULTRASONOGRAPHIC FINDINGS**

### **Primary Findings:**

- The urinary bladder wall changes could be consistent with polypoid cystitis or less likely, emerging neoplasia (i.e., transitional cell carcinoma). Urinary bladder debris along with mineralized sand and a few tiny cystic calculi are present.

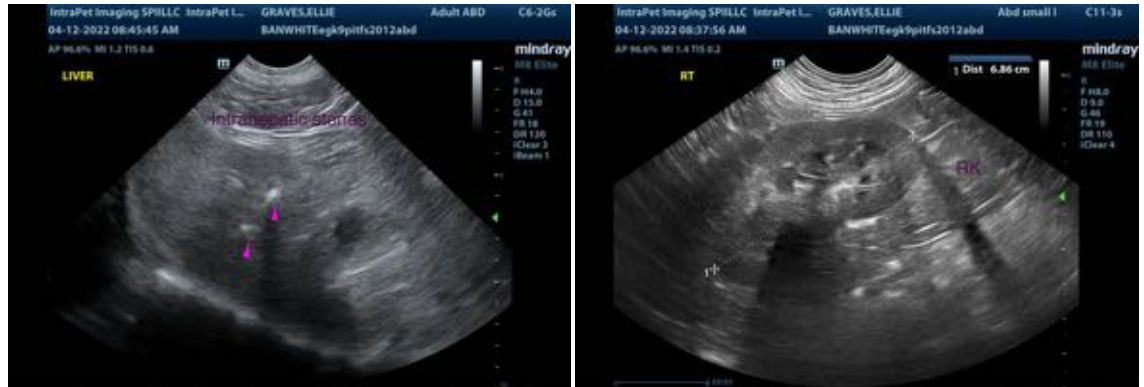
### **Secondary Findings:**

- Suspected benign diffuse hepatopathy (i.e., regenerative nodular hyperplasia and/or vacuolar hepatopathy) with intrahepatic biliary stones (incidental).
- Gallbladder debris/sand, non-mucocele.
- The origin of the hyperechoic nodule in the left cranial quadrant is unclear. It may be arising from spleen (i.e., myelolipoma) or mesentery (i.e., necrotic fat). Its significance is unknown at this time.

## **INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

- A urine culture and sensitivity is recommended, preferably on a pre-antibiotic sample or a sample obtained 5-7 days after the last dose of antibiotics. A free catch sample would be preferred in this situation over cystocentesis to avoid potential seeding of the abdomen with neoplastic cells. Also consider a urine BRAF test to assess for lower urinary tract neoplasia. If the urine BRAF test is negative and neoplasia is still suspected, a bladder wall biopsy may be necessary to get a definitive diagnosis.
- Serial sonographic monitoring (i.e., every 3-4 weeks) of the urinary bladder is recommended to assess for progression.





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 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.

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