

**DATE PRESENTING CLINICAL SIGNS**

10/18/2021

History: PU/PD diagnosed with Cushing's looking at adrenals to see if they are consistent with primary adrenal or primary pituitary.

**PATIENT**

Cookie Purvis

Current Medications: No current medications.

Lab Results: LLDS test diagnostic for Cushing's. ALT 204, ALKP elevated 1134, Isosthenuria. Thrombocytosis. No proteinuria.

Radiographs: Not provided by the veterinarian.

**SPECIES**

Canine

Date of Previous IntraPet Ultrasound: No previous IntraPet scans.

Sedation: not needed

Stat Report: not requested

**BREED**

Havanese

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

The urinary bladder is distended. The wall is normal in thickness with a smooth mucosal surface. At least 2 tiny cystic calculi are present within the lumen. The region of the trigone and the visible portion of the proximal urethra are normal.

**SEX**

Female, spayed

The left kidney is normal size (4.23 cm in length) with a normal shape, smooth peripheral margins and normal internal architecture. There is mild loss of corticomedullary distinction. Several hyperechoic shadowing diverticular foci are observed. An irregular hyperechoic medullary band is observed adjacent to the corticomedullary junction. Trace pyelectasia is present. There is no evidence of infarcts or hydronephrosis. Renal vasculature is normal.

**AGE**

6/6/2010

**WEIGHT**

14 lbs.

The right kidney is normal in size (4.25 cm in length) with a normal shape, smooth peripheral margins and normal internal architecture. There is mild loss of corticomedullary distinction. Several hyperechoic shadowing diverticular foci are observed. An irregular hyperechoic medullary band is observed adjacent to the corticomedullary junction. There is no evidence of pyelectasia, infarcts or hydronephrosis. Renal vasculature is normal.

**INTERPRETED BY**

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

**Adrenal Glands**

The left adrenal gland is enlarged (0.65 cm at cranial pole) (0.87 cm at caudal pole) (2.27 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.

**HOSPITAL NAME**

Timonium AH

The right adrenal gland is enlarged (0.79 cm at cranial pole) (0.84 cm at caudal pole) (1.92 cm in length) with a slightly irregular shape. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

**REFERRING VET**

Dr. Gernhart

**Spleen**

The spleen is normal in size (0.58 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.

**INVOICE**

12371

**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. Hepatic vasculature and biliary tracts are of normal volume with no evidence of congestion. The gall bladder lumen is moderately distended. The wall is thin and smooth. A moderate amount of aggregated echogenic suspended sludge is present within the lumen. The cystic and common bile ducts are normal/not seen.

### ***Gastrointestinal***

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.

### ***Pancreas***

The right limb of the pancreas is visible with normal curvilinear peripheral contours. The parenchyma is largely isoechoic relative to surrounding omental fat and slightly mottled in appearance. The pancreatic duct is visible but not overtly dilated. There is no evidence of peripancreatic inflammation or effusion.

### ***Free Abdomen***

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

## **ULTRASONOGRAPHIC FINDINGS**

### **Primary Findings:**

- Bilateral adrenomegaly is consistent with a diagnosis of pituitary dependent hyperadrenocorticism.
- The hepatic changes are consistent with age-related parenchymal remodeling and are not considered clinically significant at this time.
- The gallbladder sludge is not consistent with a mucocele at this time. However, given that it is suspended and that the patient has hyperadrenocorticism, there is the potential for progression to a mucocele.
- Tiny cystic calculi.

### **Secondary Findings:**

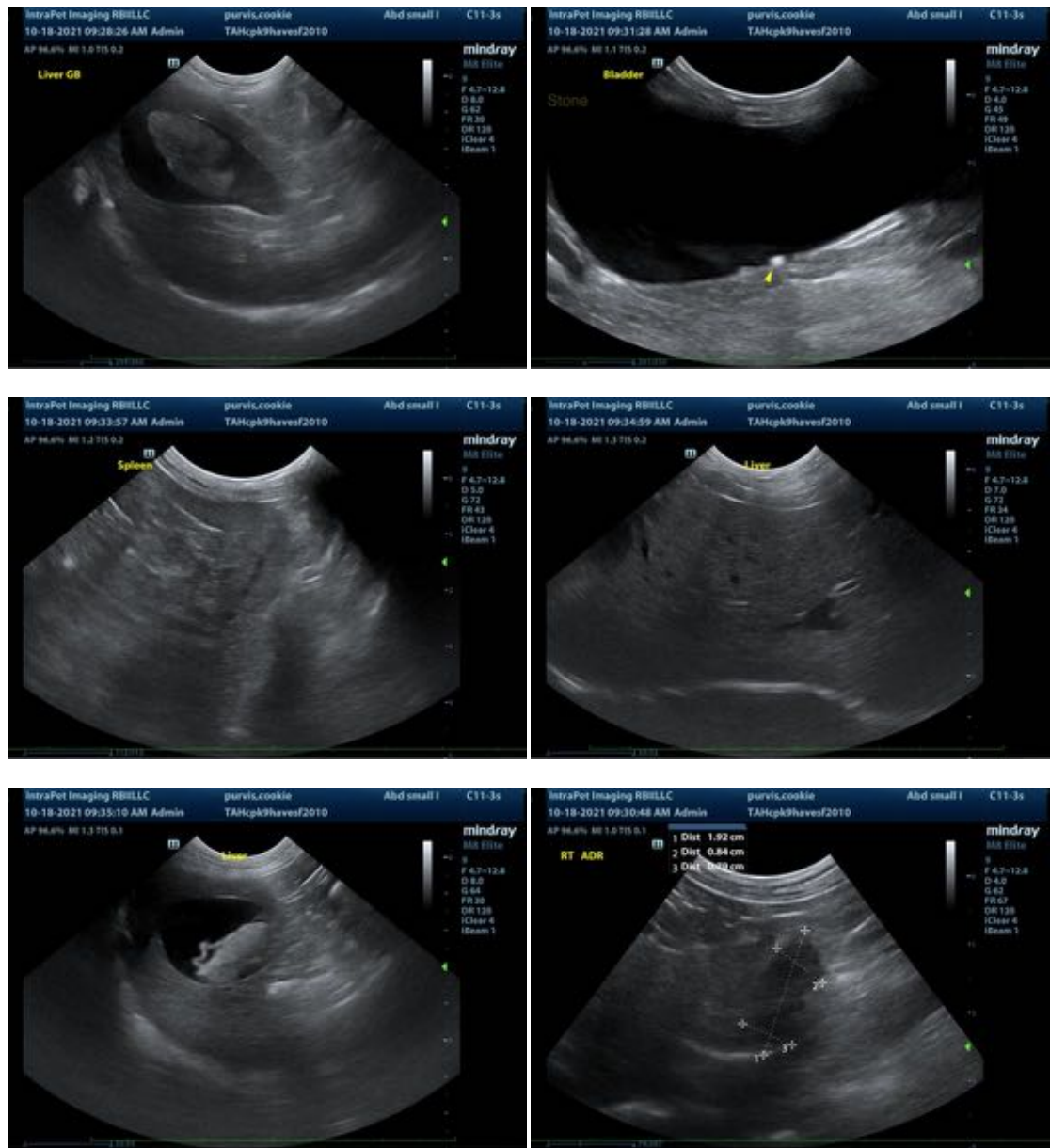
- Bilateral age-related renal changes with dystrophic mineralization.
- The pancreatic changes are most consistent with age-related parenchymal remodeling, potentially secondary to a prior inflammatory episode, early fibrosis or chronic pancreatitis.

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

- Regarding the Cushing's disease, initiation of medical therapy (i.e., Trilostane) is recommended. A baseline blood pressure measurement should also be considered as many Cushingoid dogs are hypertensive at the time of diagnosis.
- Given the gallbladder changes, consider a repeat ultrasound in 3-4 months to assess for progression to a mucocele.
- A cystotomy with stone removal, analysis and culture is recommended. Alternatively, medical dissolution of the stones can be considered with a prescription renal diet and broad-spectrum antibiotic therapy. If there is no improvement in stone size after 4 weeks of therapy, a cystotomy

should be reconsidered. If the stone size is reduced, continue therapy until complete dissolution has been achieved.

- Given the patient's age, three-view thoracic radiographs are recommended to assess cardiopulmonary status.





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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