



**PATIENT**

Conner Klinger

**SPECIES**

Canine

**BREED**

Dachshund

**SEX**

Neutered Male

**AGE**

12 years

**WEIGHT**

7.9 kg

**INTERPRETED BY**

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

**IMAGING  
PERFORMED BY**

Dr. Brittany Gardner  
DVM

**HOSPITAL NAME**

Wilvet Salem

**REFERRING VET**

Dr. Brittany Gardner  
DVM

**INVOICE**

10754

**DATE**

4/15/22

**PRESENTING CLINICAL SIGNS**

History: P is being hospitalized overnight for supportive care for hemorrhagic diarrhea/retching and for AUS. Diagnosed with Cushing's in hospital and trilostane therapy started. BAR HR 100, RR 40, mm=pink, wet, grade 3-4 dental disease with severe crown wear. no ocular or nasal discharge. normal PLR, corneas clear. abdomen tense on palpation. lungs clear. poor musculing. diffuse coat thinning, symmetrical.

Abnormal PE/Chem/CBC/UA Results: 1. 3 view ab rads STAT review no sign of blockage, thickened bowel noted and enlarged liver 1.5 - ePoc - WNL 1.6 - fecal IDEXX o+P 2. ACTH stim test - pre-ACTH 10.38ug/dL and post aabove 30ug/dL - consistent with hyperadrenocorticism

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**Urinary System**

The urinary bladder, trigone, and pelvic urethra are normal in thickness and the mucosal surface is smooth. The bladder lumen is moderately distended with mostly anechoic urine. No masses, inflammatory changes or calculi are observed. The region of the trigone and the visible portion of the proximal urethra are normal.

The prostate is normal to slightly prominent in size (1.54 cm in width) with a normal shape and homogenous parenchyma. No distinct focal lesions are observed. The prostatic urethra is not overtly dilated.

The left kidney presented normal size (5.11 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal to mild loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The right kidney presented normal size (5.78 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal to mild loss of corticomedullary distinction. A small cortical cysts is observed at the lateral aspect. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

**Adrenal Glands**

The left adrenal gland is enlarged (0.80 cm at cranial pole) (1.35 cm at caudal pole); with an irregular shape. The parenchyma is heterogenous with loss of glandular detail. The phrenicoabdominal vein and surrounding vasculature are normal.

The right adrenal gland is enlarged (1.24 cm at cranial pole) (0.94 cm at caudal pole) (2.16 cm in length); with an irregular shape. The parenchyma is heterogenous with loss of glandular detail. The phrenicoabdominal vein and surrounding vasculature are normal.

**Spleen**

The spleen is normal in size (1.24 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 enlarged with swollen, peripheral contours. The parenchyma is isoechoic relative to the spleen and slightly heterogenous in appearance, with a few irregular, hyperechoic nodules on the right side. A 0.58 cm cystic lesion is observed on the left side. Hepatic vasculature and intrahepatic 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, partiallydependent to suspended sludge is observed within the lumen. The cystic

and common bile ducts are normal.

### ***Gastrointestinal***

The gastric lumen is distended with ingesta. 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 segmentally dilated with chyme. 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 or overt infiltrative disease is noted.

### ***Pancreas***

The pancreas is partially obscured by the distended stomach. In the visualized portion, no obvious pathology is seen.

### ***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**

- The bilateral adrenomegaly is consistent with the previous diagnosis of pituitary-dependent hyperadrenocorticism.
- The diffuse hepatic changes are non-specific and could be consistent with vacuolar hepatopathy, regenerative nodular hyperplasia, and/or age-related remodeling. Inflammatory and infiltrative disease are considered less likely. The hyperechoic hepatic nodules trend toward the benign (i.e., regenerative nodules) with a lower possibility of a neoplastic process.
- The gall bladder changes could be consistent with a developing mucocele, cholestasis, or less likely, fasting.

### **Secondary Findings**

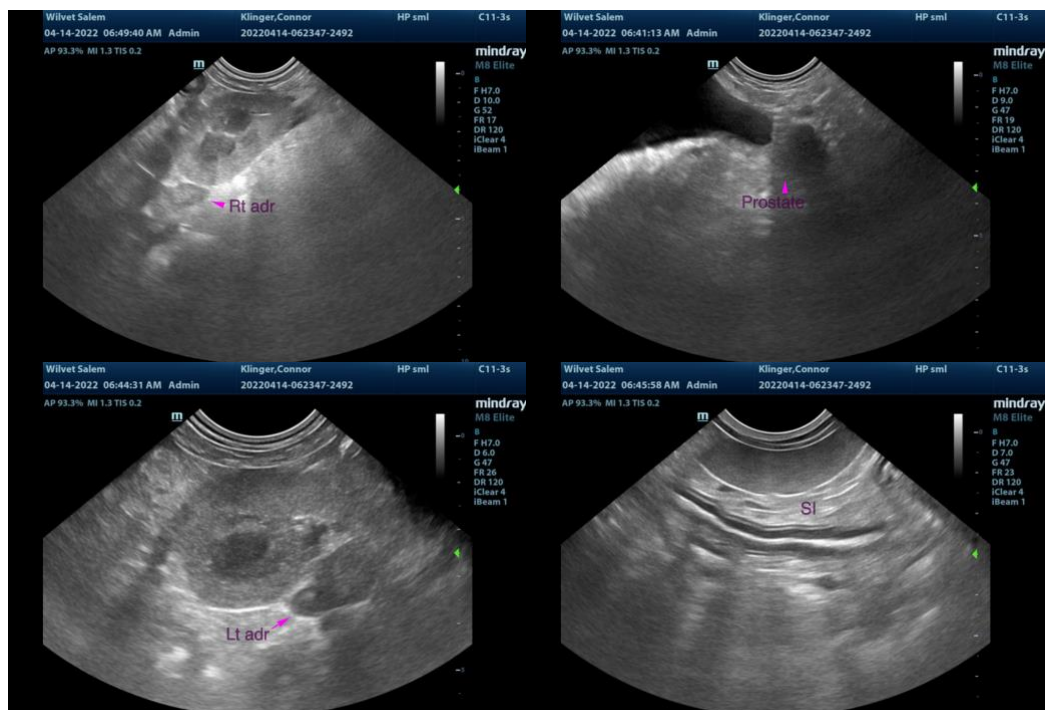
- Minor, chronic, nonspecific age-related renal changes
- The prominent prostate may be a normal variant for this patient or may be secondary to late-in-life neutering (if applicable), or emerging neoplasia. Correlation with clinical findings is recommended.

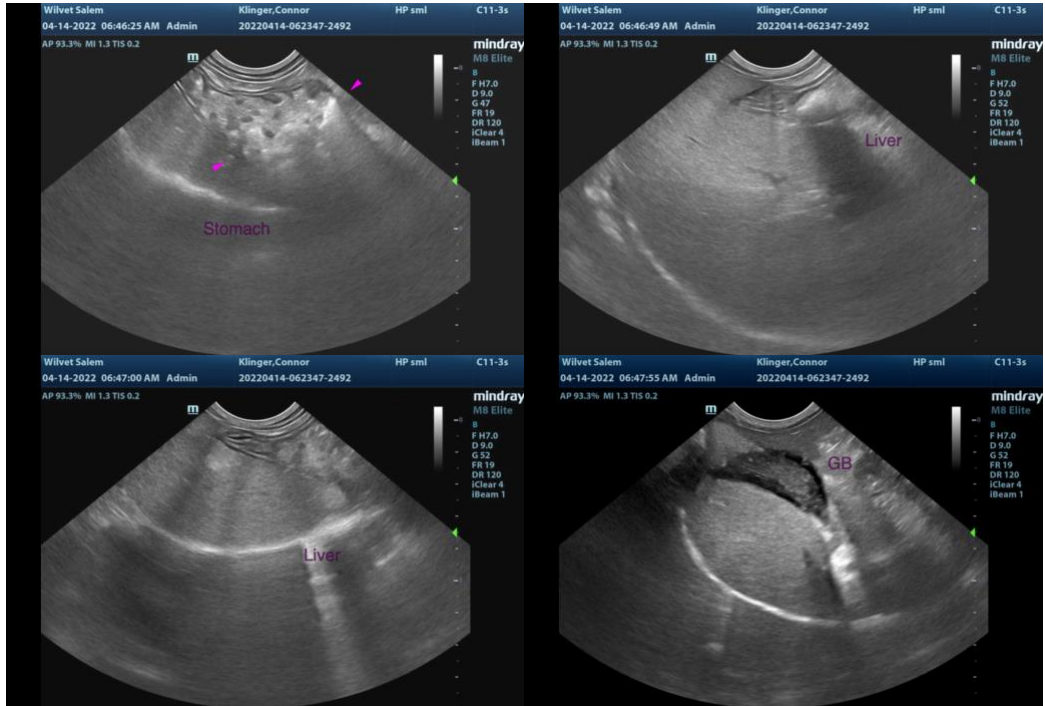
\*\*An obvious cause for the patient's clinical signs is not identified in this study. Considerations include hemorrhagic gastroenteritis, infectious/parasitic disease, dietary indiscretion, low-grade pancreatitis, underlying metabolic issue, other.

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

- Prophylactic deworming with Fenbendazole at 50 mg/kg once a day for 5 days is recommended. Repeat above protocol in 3 weeks.

- Consider a fecal/PCR infectious disease panel
- Supportive care for acute hemorrhagic gastroenteritis is recommended, including fluid therapy, gastric protectants, antiemetics and broad-spectrum antibiotics (to address bacterial translocation). If clinical signs do not improve within 24-72 hours of initiating medical therapy, a more advanced GI work-up may be warranted.
- Given the patient's age, three-view thoracic radiographs are recommended to assess for occult aspiration pneumonia or other cardiopulmonary abnormalities.
- Regarding the gall bladder changes, consider a repeat ultrasound in 3-4 weeks, preferably 2-3 hours post-small meal. If changes are similar to the current scan, Ursodiol therapy can be considered.





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.

**Andrea Nicastro, DVM, Diplomate DACVIM (Small Animal Internal Medicine)**  
info@SonoPath.com