

**DATE PRESENTING CLINICAL SIGNS**

8/16/22

Heart &amp; kidney dz.

**PATIENT**

Fredo Loehr

Current Medications: Vetmedin 2.5mg BID, Orbax 22mg SID, Fortiflora SID, 0.9% NACL 150CC EOD, Azodyl SID, Renal K BID, Gabapentin 100mg BID.

Lab Results: Azotemia.

Radiographs: Enlarged heart.

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

Imaging Performed By: Andi Parkinson, BS, RDMS.

**SPECIES**

Canine

**BREED**

King Charles Cavalier

**SEX**

Male, neutered

**AGE**

4/21/2013

**WEIGHT**

21 lbs.

**INTERPRETED BY**Andrea Nicastro, DVM,  
Diplomate ACVIM  
(Small Animal Internal  
Medicine)**HOSPITAL NAME**

Chadwell AH

**REFERRING VET**

Dr. Gold

**INVOICE**

13840

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

The urinary bladder wall is normal in thickness and the mucosal surface is smooth. The bladder lumen is moderately distended with anechoic urine. No masses, inflammatory changes or calculi are observed. Ureteral papillae and visualized portion of the proximal urethra, visible to a depth of 2 cm, are normal.

The prostate is normal in size (0.79 cm in width) and shape. Parenchyma is homogenous. The prostatic urethra appears normal without evidence of dilation or obstruction.

The left kidney is normal size (4.63 cm in length) with an irregular shape. The cortex is variably thickened and there is poor corticomedullary distinction. A cortical infarct is suspected at the lateral aspect. Moderate pyelectasia is present (0.48 cm in the transverse plane). There is no evidence of nephroliths or hydroureter. Renal vasculature is normal.

The right kidney is normal size (4.26 cm in length) with an irregular shape. The cortex is variably thickened and there is poor corticomedullary distinction. A cortical infarct is suspected at the lateral aspect. Moderate pyelectasia is present (0.33 cm in the longitudinal plane). A 0.58 cm cortical cyst is observed at the medial aspect. There is no evidence of nephroliths or hydroureter. Renal vasculature is normal.

**Adrenal Glands**

The left adrenal gland is normal size (0.57 cm at cranial pole) (0.63 cm at caudal pole) (2.18 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.

The right adrenal gland is normal size (0.51 cm at cranial pole) (0.65 cm at caudal pole) (2.25 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.

**Spleen**

The spleen is normal in size (1.52 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 normal in size with normal contours and structure. There is appropriate echogenicity and echotexture. No overt structural evidence of inflammatory, infiltrative or regenerative pathology is evident. Vascular and biliary tracts are of normal volume with no evidence of congestion. No pathological hepatic lymphadenopathy observed. The gall bladder lumen is moderately distended. The wall is thin and

smooth. A moderate amount of aggregated echogenic partially dependent to suspended sludge is observed 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:**

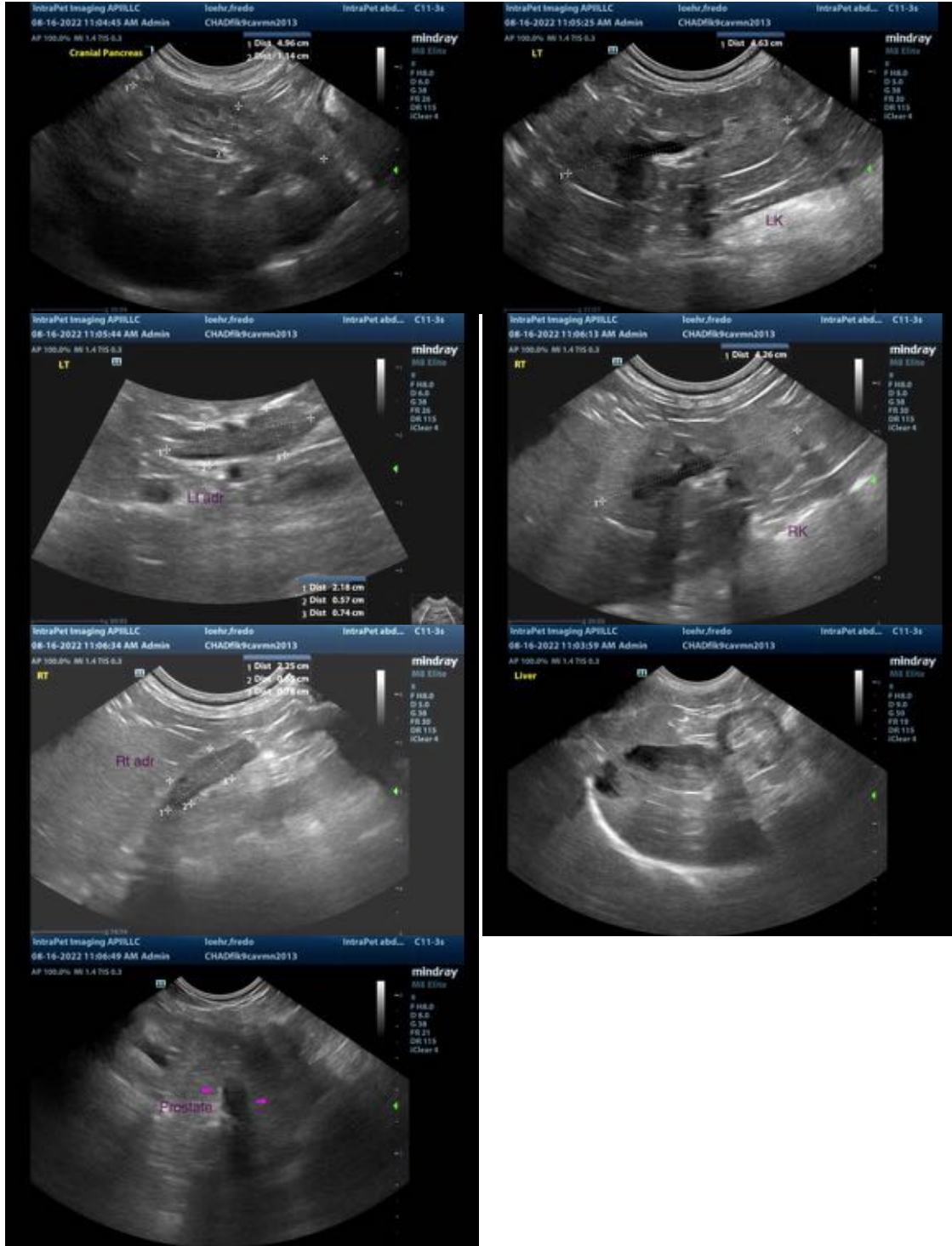
- Bilateral, degenerative renal changes with suspected cortical infarcts. The bilateral pyelectasia may be secondary to pyelonephritis, age-related remodeling, PU/PD, or some combination thereof.

### **Secondary Findings:**

- The pancreatic changes are most consistent with age-related parenchymal remodeling, potentially secondary to a prior inflammatory episode, early fibrosis or chronic pancreatitis.
- The gallbladder sludge could be consistent with cholestasis, fasting or early mucocele formation.

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

- Regarding the clinical history and sonographic renal changes, consider the following:
  1. Urine culture and sensitivity.
  2. UPC (if proteinuria is present).
  3. Baseline blood pressure measurement.
  4. Transition to a prescription renal diet if not already receiving one.
  5. Serial monitoring (i.e., every 3-4 months) of the patient's renal values is recommended to assess for progression of disease.
- Regarding the gallbladder sludge, consider initiation of Ursodiol therapy. Alternatively, consider a repeat ultrasound in 3-4 weeks, preferably 1-2 hours post meal. If gallbladder changes are similar to the current scan, Ursodiol can be initiated at that time.



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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