

**DATE PRESENTING CLINICAL SIGNS**

10/15/21

History: Longstanding history of skin/ear allergic disease. Chronic UTIs recently.

**PATIENT**

Hypercalcemia with diagnosis of secondary hyperparathyroidism by Michigan St. Eats hills c/d with green beans and milkbone treats.

Roxy Holland

**SPECIES**

Current Medications: gets Claro, Cytopoint chronically, recently getting Convenia injections for bacterial pyoderma, just recently started Terbinafine too.

Canine

Date of Previous IntraPet Ultrasound: 12/22/2020

Sedation: not needed

Stat Report: not requested

**BREED**

Shih Tzu

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN****SEX****Urinary System**The **urinary bladder**, trigone, and pelvic urethra presented normal thicknesses and normal tone. The ureters were not visible which is normal. No uroliths or sediment were visualized and anechoic urine was present. No evidence of inflammatory or neoplastic changes were noted. Ureteral papillae were normal.

Spayed Female

**AGE**

2008

The **kidneys** presented thickened cortices consistent with glomerulonephritis. The left kidney measured 4.96 cm with corticomedullary calculi. The right kidney measured 5.03 cm with corticomedullary mineralization.**WEIGHT**

16.25 Pounds

**Adrenal Glands**The **left adrenal gland** was enlarged (similar to the prior sonogram), measuring 2.37 cm x 0.83 cm at the cranial pole and 0.66 cm at the caudal pole.**INTERPRETED BY**Eric Lindquist, DMV  
DABVP, Cert. IVUSSThe **right adrenal gland** was visualized and recognized as having normal shape, size, position and echogenicity for this breed. The phrenic vasculature, glandular echogenicity and detail were unremarkable. Capsule, cortex, and medullary definition were normal for this age patient. The right adrenal gland measured 2.3 cm x 0.87 cm at the caudal pole and 0.93 cm at the cranial pole.**HOSPITAL NAME**

Chadwell AH

**Spleen**The **spleen** presented a smooth homogeneous parenchyma hyperechoic to liver and renal cortical parenchyma. The capsule was smooth without noticeable expansion or deviation from within the spleen or adjacent pathology. The splenic vasculature demonstrated normal volume without signs of congestion or thrombosis. No sonographic evidence of acute or chronic inflammatory, neoplastic, or infarctual changes were noted.**REFERRING VET**

Dr. Haskin

**INVOICE**

13804

**Liver**The **liver** revealed minor increased portal markings and remodeling. Gallbladder debris noted with trace amount of sand (improved compared to the prior sonogram).**Gastrointestinal**Examination of the **gastrointestinal tract** revealed a stomach and intestine free of stasis, of normal wall thickness, acceptable curvilinear mural detail, and peristaltic activity. Small and large intestine demonstrated normal luminal chyme and stool consistency respectively. No obstructive or overt infiltrative disease was noted. No associated abnormal lymphatic activity was noted.

## Pancreas

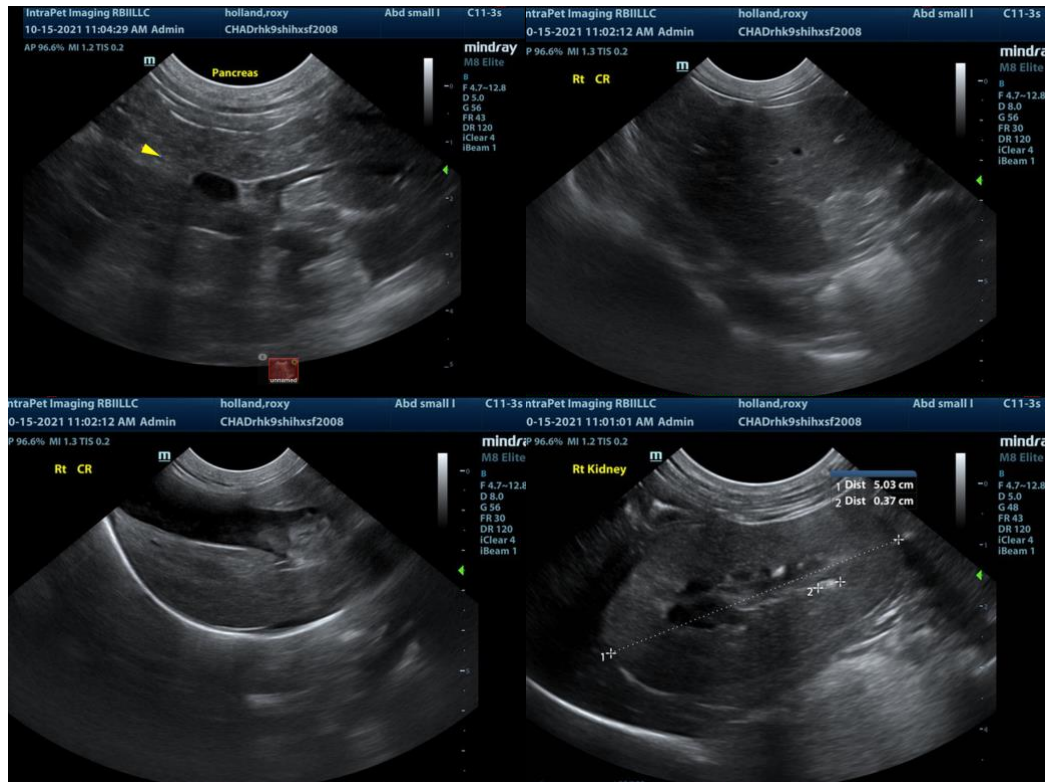
The base and limbs of the **pancreas** were observed to be largely isoechoic to surrounding omental fat. Some mild parenchymal remodeling, however, with mild deviation from curvilinear normalcy was observed. Pancreatic duct and capsular irregularities were present consistent with age related changes. If pain upon imaging (+ Murphy sign) was present or if the patient is focally painful in subxyphoid palpation then low-grade smoldering chronic pancreatitis should be suspected.

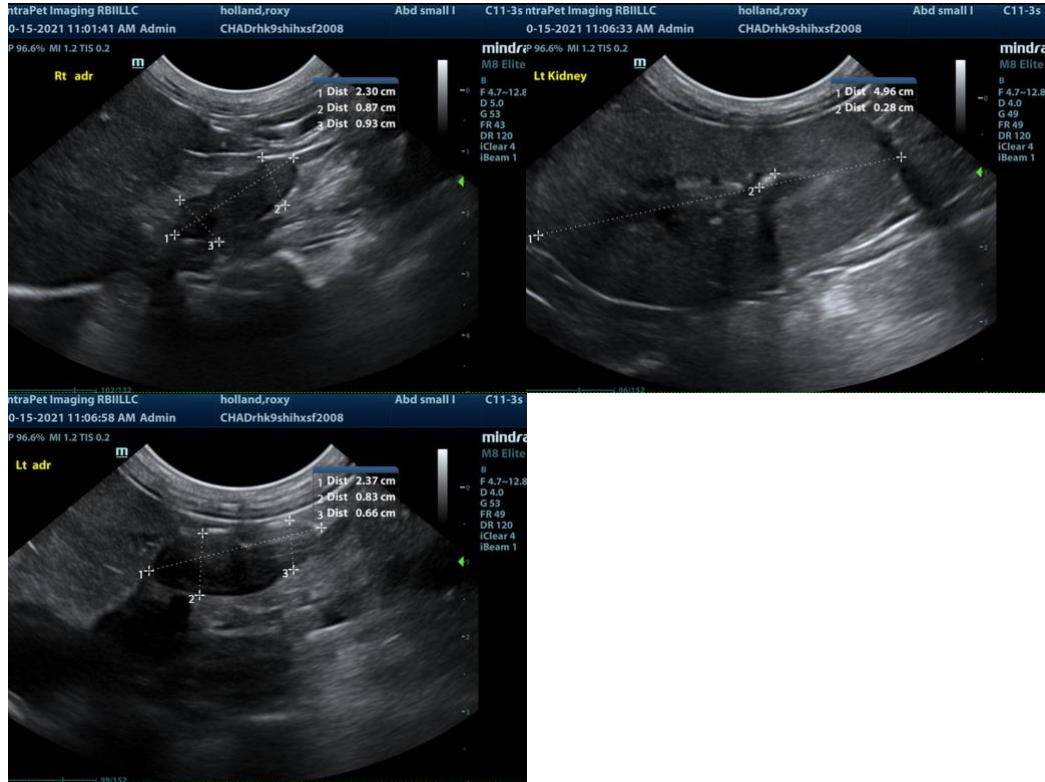
## ULTRASONOGRAPHIC FINDINGS

- Moderate chronic renal changes with mineralization
- Persistent bilateral adrenal hypertrophy
- Age-related pancreatic changes
- Minor residual gallbladder debris and calculi

## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Largely expected geriatric abdominal changes. Given the patient history, imaging of the thyroid and parathyroid recommended.





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.

**Eric Lindquist**, DMV, DABVP, Cert. IVUSS, CEO of SonoPath.com  
[info@SonoPath.com](mailto:info@SonoPath.com)