

**DATE PRESENTING CLINICAL SIGNS**

11/15/22

Patient presents for evaluation - well-managed hyperthyroid going in for RAIT. Incidental opacity found on radiographs in the craniodorsal aspect of abdomen. Radiologist suspects chronic renal infarct but cannot rule out adrenal mass.

**PATIENT**

Callie Burger

Current Medications: Patient was medicated with 2.5 mg Felimazole SID but is off of medications at this time in preparation for RAIT.

Lab Results: See attached.

**SPECIES**

Feline

Radiographs: Mild diffuse bronchial pulmonary pattern; this finding is nonspecific, and differential diagnoses include allergic/inflammatory airway disease or infectious etiologies. Probable chronic renal degeneration (unilateral versus asymmetric), less likely an adrenal gland mass. Evaluation is limited.

**BREED**

DSH

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

**SEX**

Spayed Female

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

Urinary bladder is only mildly distended (empty). Visible contents are anechoic. Urinary bladder wall is unable to be fully assessed for pathology without further distension. No visible masses or cystoliths are observed. The trigone and visible pelvic urethra are normal thickness with a smooth mucosal surface. If there are urinary signs and/or concern for urinary bladder pathology, reassessment after complete filling is recommended. The wall of the urinary bladder appears mildly hyperechoic and thick and irregular. However, reevaluation is recommended with a fully distended bladder.

**AGE**

12/5/08

**WEIGHT**

9 Pounds

Kidneys are bilaterally irregular and diffusely echogenic with decreased corticomedullary distinction and poor visualization of internal architecture. There is no pyelectasia noted and no mineral is observed. A small chronic infarct is noted in the right kidney. The right kidney is subnormal in size (2.05 cm) and the left kidney is normal in size (3.79 cm).

**INTERPRETED BY**

Beth Johnson, DVM  
DACVIM

**Adrenal Glands**

The right adrenal gland is normal in size (0.38 cm), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

**IMAGING PERFORMED BY**

Stephanie Warga  
RDCS, RVT

The left adrenal gland is normal in size (0.39 cm), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

**HOSPITAL NAME**

Perry Hall AH

**Spleen**

The spleen is subjectively normal in size with a normal smooth capsular contour. Parenchyma is appropriately finely textured and homogenous with normal echogenicity relative to surrounding tissue (hyperechoic to liver). No focal nodules or masses are observed. Splenic vasculature appears normal.

**REFERRING VET**

Dr. Miller

**Liver**

The liver is subjectively normal in size with normal smooth curvilinear peripheral contour. Parenchyma is appropriately hypoechoic to the spleen in echogenicity and appropriately mildly coarse and homogenous in echotexture. No focal lesions are observed. Visible vasculature and biliary tree appear normal without distension or congestion.

**INVOICE**

42714

The gallbladder is non-distended in size. The wall is smooth without visible thickening. Luminal contents are primarily anechoic. There is no evidence of cystic or common bile duct dilation.

### ***Gastrointestinal***

The stomach wall is normal in thickness (canine < 0.5 cm and feline < 0.4 cm) and layering. The lumen of the stomach is empty with no evidence of obstruction, foreign material or infiltrative disease. Pyloric outflow tract appears patent.

The visible small intestines are normal in wall thickness and layering (canine duodenum < 0.5 cm and feline duodenum < 0.4 cm; other < 0.3 cm). Small intestinal motility appears adequate (1-3 contractions per min). The lumen of the small intestine is empty with no evidence of obstruction, foreign material or infiltrative disease.

The visible colon is normal in wall thickness (< 0.2 cm) and layering. Contents are consistent with normal formed feces and gas.

### ***Pancreas***

The pancreas is visible, but normal in appearance with no evidence of active inflammation.

### ***Free Abdomen***

There is no evidence of free peritoneal effusion noted in these images.

The mesenteric lymph nodes are prominent in size with swollen capsular contour. Normal elongated shape (length to width ratio) is maintained. There is no loss of parenchymal detail.

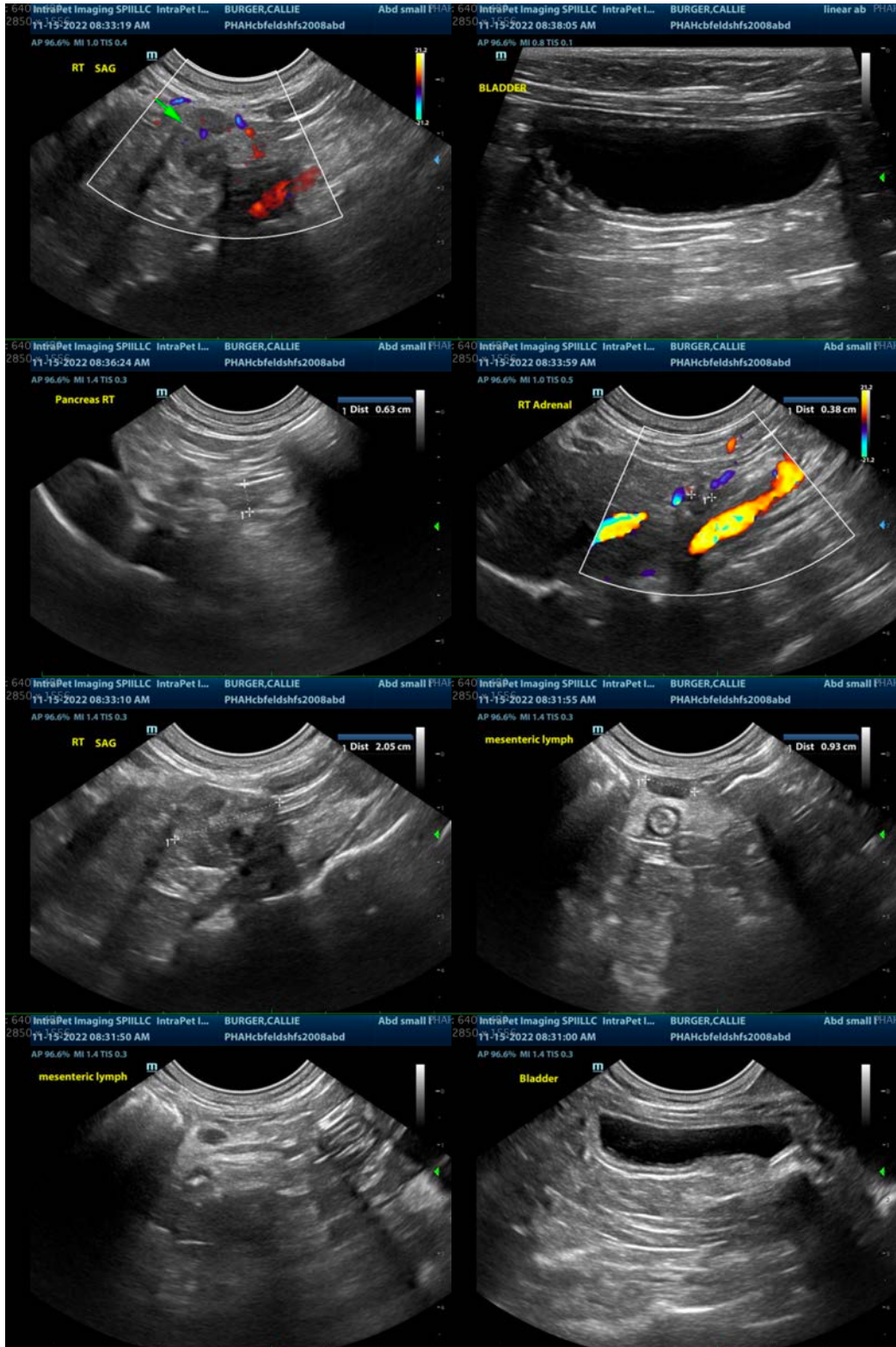
## **ULTRASONOGRAPHIC FINDINGS**

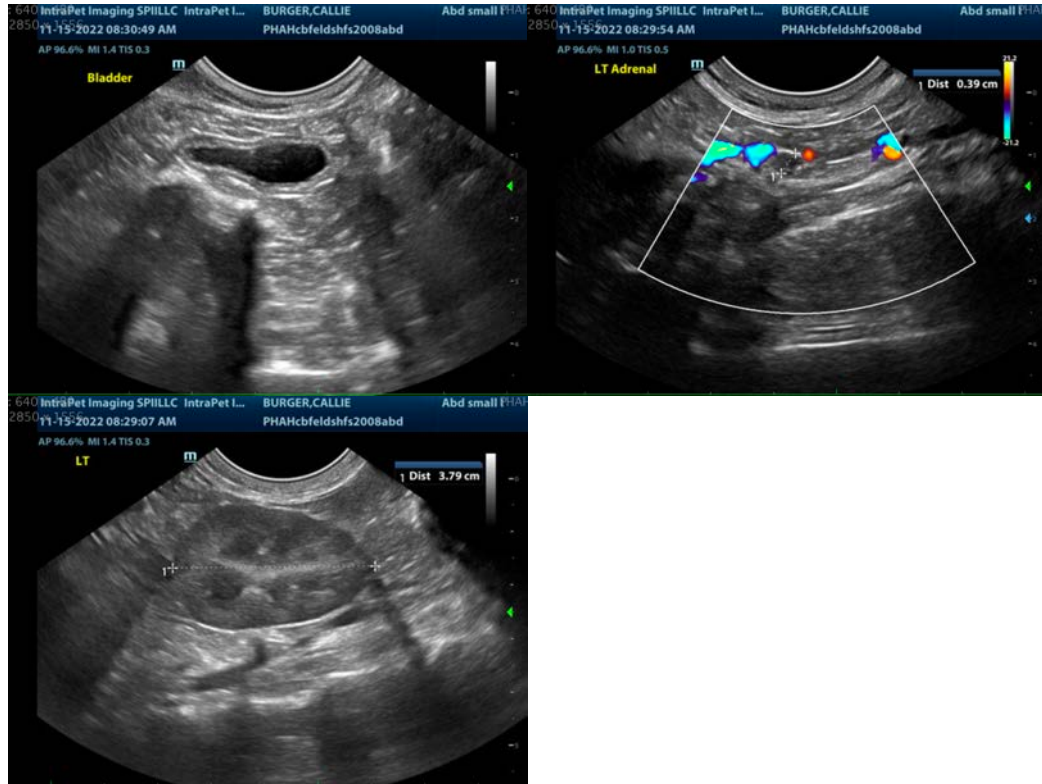
- **Chronic Kidney Disease with a chronic infarct noted in the right kidney** – This appearance of the kidneys is consistent with chronic kidney disease such as chronic glomerular or interstitial nephritis, chronic pyelonephritis, etc.
- **Reactive mesenteric lymph nodes** – infiltrative neoplastic disease cannot be ruled out but is considered less likely.

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

If not recently evaluated, Urinalysis and, if indicated based on urinalysis results, urine culture are recommended. If protein is present in an otherwise quiet sediment, protein quantification with a urine protein to creatinine ration is recommended.

Otherwise, recommendations are to proceed with management of hyperthyroidism, as is reportedly planned. However, given the visible kidney changes, if not already evaluated, recommendations are to treat the hyperthyroidism medically until the kidneys are evaluated via a chemistry panel in the face of a euthyroid state, as hyperthyroidism can mask chronic kidney disease, and permanent I-131 treatment is irreversible if it is discovered that marked azotemia develops in the face of a euthyroid state.





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.

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