

DATE	PRESENTING CLINICAL SIGNS
01/12/26	Patient History: Presented 12/09 for a recheck of his cough. The owner reports the cough has been worsening over the past few months, describing it as sounding like a cat with a hairball. The cough was previously treated
PATIENT	with antibiotics and prednisone, which provided temporary relief. The owner notes that rubbing the patient's neck can sometimes soothe the cough. The patient is blind but otherwise acts normally at home and is still playful. There is a history of trash-picking, and the owner is concerned he may have ingested part of an aluminum cat food lid. The owner also reports increased thirst and urination for the past six months. Appetite is good, and there is no vomiting or diarrhea. The patient is on a weight-management diet. He is currently receiving Optimune for keratoconjunctivitis sicca (KCS) and has a Seresto collar for flea prevention. He is not on heartworm prevention. The patient lives in a household with smokers. On exam no murmurs detected but harsh lung sounds, KCS.
Cosmo Ehrlich	
SPECIES	
Canine	
BREED	
Shih Tzu	Current Medications: Optimune, Hydrocodone 5mg 1/2 q 6 hrs prn cough since 12/9
SEX	Labwork Results: Labwork attached. Reported as Neutrophils 10.163 (3.004 - 9.741 K/ μ L), Platelets 552 (120 -, 412 K/ μ L), BUN 33 (9 - 31 mg/dL), Potassium 5.5 (4.0 - 5.4 mmol/L), Na: K Ratio 27 (28 - 37), Chloride 103 (108 - 119 mmol/L), TCO ₂ (Bicarbonate) 28(13 - 27 mmol/L), ALP 201 (5 - 160 U/L), Cholesterol 361 (131 - 345 mg/dL), Specific Gravity 1.014 (1.030 - 1.098). Rads: 1. The appearance of the left atrium on the right lateral view may represent the normal phase of the cardiac silhouette, however myxomatous mitral valve degeneration and dilated cardiomyopathy are also considered. 2. Bronchial pattern -Differentials include age-related change, infectious bronchitis, heartworm disease, eosinophilic bronchopneumopathy and unlikely fungal disease or neoplasia. 3. Narrowing of the carina and left mainstem bronchus may represent collapse secondary to
Neutered Male	chondromalacia versus compression from adjacent left atrial enlargement. -This may be the cause of or contributing to the patient's clinical signs. 4. Hepatomegaly -Differentials include vacuolar hepatopathy, acute hepatitis and neoplasia.
AGE	Date of Previous IntraPet Ultrasound: No previous.
9/18/11	Sedation: Not required to complete full diagnostic ultrasound.
WEIGHT	Stat Report: Not requested.
25.5 pounds	Imaging Performed by: Andi Parkinson, BS, RDMS.
INTERPRETED BY	
Beth Johnson, DVM DACVIM	ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN
HOSPITAL NAME	Urinary System
Fullerton Animal Hospital	Urinary bladder is only mildly distended. Visible contents are anechoic. Urinary bladder wall is unable to be fully assessed for pathology without further distension. No visible masses or definitive cystoliths are observed. The trigone and visible pelvic urethra are normal thickness with a smooth mucosal surface. In the face of urinary signs and/or suspected urinary bladder pathology, reassessment after complete filling is recommended.
REFERRING VET	Prostate is normal in size, echotexture and echogenicity for a neutered male.
Dr. Unger	
INVOICE	Kidneys are overall normal in size and shape with smooth peripheral margination. A normal 1:3 cortex to medulla ratio is maintained. The medulla and cortices are uniform in texture with some mild increased cortical echogenicity and mild loss of corticomedullary distinction, expected in this age patient. There is no evidence of mineral or infarcts observed. The left kidney measures 4.53 cm with mild to moderate pyelectasia measuring 0.35 cm in the transverse view along with a cortical cyst in the caudal pole. The right kidney measures 5.14 cm.
13114	

Adrenal Glands

Left adrenal gland is normal in size (0.59 cm at cranial pole and 0.53 cm at caudal pole), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

Right adrenal gland is normal in size (0.66 cm at cranial pole and 0.45 cm at caudal pole), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

Spleen

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.

Liver

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.

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 visible stomach wall is normal in thickness 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. 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 that is observed appears appropriately isoechoic to surrounding omental fat. Visible capsule is smooth and normal in contour. Visible pancreatic parenchyma is homogenous and unremarkable. There is no visible pancreatic duct dilation. There is no evidence of active peripancreatic inflammation.

Free Abdomen

There is no visible free peritoneal effusion noted in these images.

There is no apparent pathologic lymphadenopathy noted in these images.

ULTRASONOGRAPHIC FINDINGS

- Moderate age-related kidney changes most visibly significant in the left kidney where there is mild to moderate pyelectasia noted.

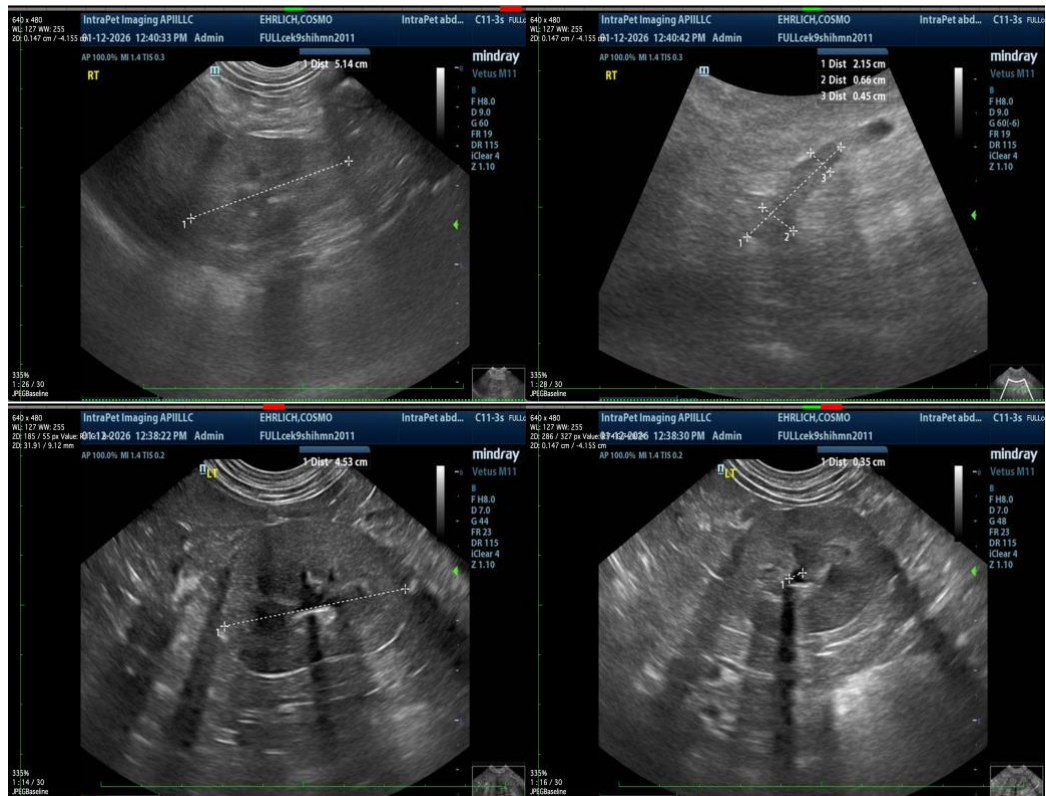
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

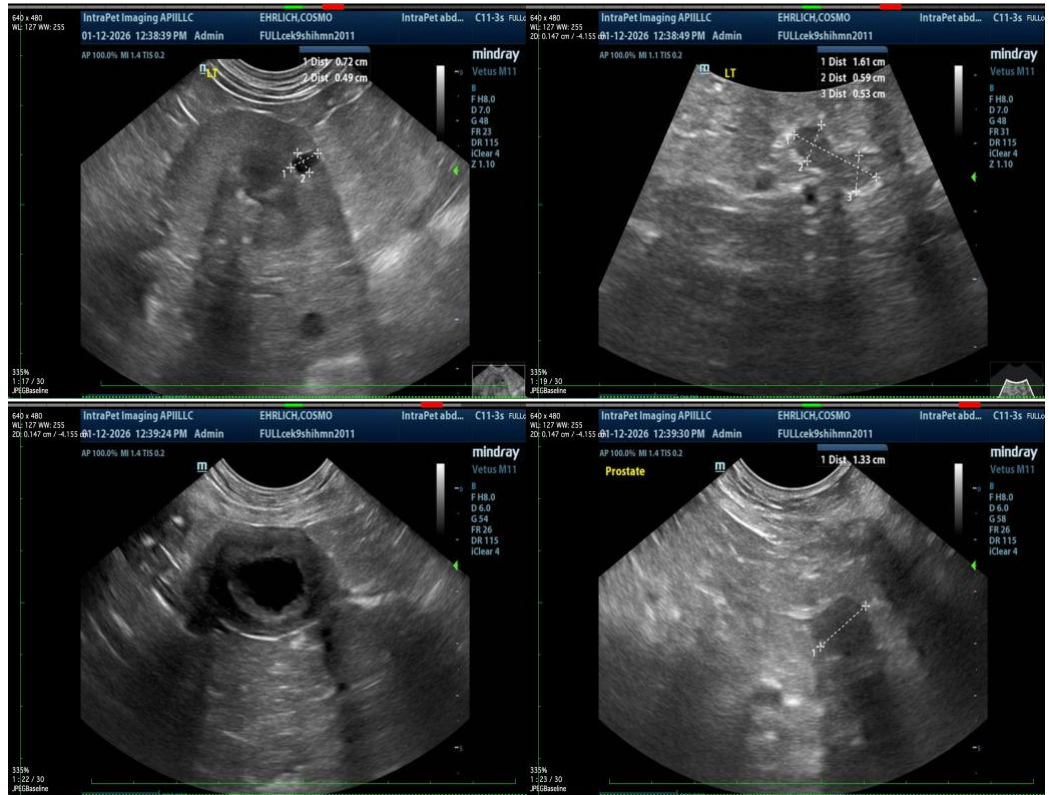
Early or emerging chronic kidney disease as a contributing factor to the patient's reported PU/PD and/or even concurrent urinary tract infection can't be ruled out.

Differentials for PU/PD are vast and include, but are not limited to:

Primary polyuria caused by chronic kidney disease, pyelonephritis, liver disease, diabetes mellitus, hyperthyroidism, hypercalcemia, hyperadrenocorticism, hypoadrenocorticism, E.coli infections ie) pyometra in females, polycythemia, central diabetes insipidus or primary nephrogenic diabetes insipidus
Primary polydipsia caused by psychogenic polydipsia, fever, pain, or central nervous system disease

Most causes of PU/PD can be diagnosed with a comprehensive history and physical exam, a first AM urine specific gravity to see if urine concentration is possible (as most animals naturally consume less water overnight) followed by a comprehensive CBC, serum chemistry panel, electrolytes, and urinalysis. If not, next step(s) may include a urine culture, low dose dexamethasone suppression test, T4, bile acids, Leptospirosis testing and/or an empirical course of antibiotics. If a diagnosis is still not obtained, a more advanced work-up is indicated and consultation with an internist may be warranted.





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.

Beth Johnson, DVM DACVIM

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