

**DATE**

9/26/22

PRESENTING CLINICAL SIGNS**PATIENT**

Dizzy Sapia

History: Sam Patient presents to clinic with lethargy, decreased appetite and straining to urinate. Owners report that patient has chronic kidney disease and has had this diagnosis for @ 1 year. Patient was taken to his regular veterinarian on Friday 23 September 2022. AT the time the regular DVM obtained a urine sample that was significant for red blood cells. He was treated with a broad-spectrum antibiotic, pain medication and prazosin. Owners report that Dizzy was initially doing well following Friday's visit however on Saturday he began to become lethargic with decrease in appetite. Owners report that patient has been hiding during the day today and dribbling small amounts of urine. These behaviors are unusual for Dizzy. Owners deny vomiting and diarrhea and have no additional concerns at this time.

SPECIES

Feline

BREED

DLH

SEX

Neutered Male

Current Medications: None listed.

Date of Previous IntraPet Ultrasound: 5/1/2018 and 6/19/2018.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

Imaging Performed By: Rachel Brillhart, RDMS.

AGE

12/7/05

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**Urinary System**

The **urinary bladder** was overdistended and catheterized with echogenic debris. The bladder wall presented mild to moderate wall thickening with irregular contour. Apical wall thickening of 1.02 cm was noted with a hypoechoic mural defect within the apical ventral wall.

WEIGHT

9.3 Pounds

The **left kidney** revealed moderate degenerative changes with corticomedullary calculi and interstitial nephrosis pattern. The largest calculi measured 0.54 cm and 0.65 cm at the corticomedullary junction.

INTERPRETED BYEric Lindquist, DMV
DABVP, Cert. IVUSS

The **right kidney** revealed pyelectasia (0.53 cm). The right kidney measured 3.49 cm. Cortical infarcts and mineralization were noted. Moderate degenerative renal changes were noted otherwise.

HOSPITAL NAMEAnimal Emergency
Hospital**Adrenal Glands**

Both **adrenal glands** were 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 left adrenal gland measured 0.54 cm.

REFERRING VET

Dr. Goessling

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.

INVOICE

17462

Liver

The **liver** images from right and left intercostal as well as subcostal views revealed subjectively normal liver size, contour, and structure. Some moderate age-related parenchymal remodeling was noted but likely not clinically significant at this time. Vascular and biliary tracts were of normal volume and no evidence of congestion was noted. The gallbladder presented some dependent debris with essentially normal contour.

The cystic and common bile ducts were normal. No overt evidence of active inflammatory, infiltrative or regenerative pathology was noted but should be paired with current or past LE elevations regarding any clinical significance to this presentation. The hepatic lymph nodes were unremarkable.

Gastrointestinal

The **gastrointestinal** presentation revealed mild uniform prominence of the gastric mucosa as well as areas of "ropey" small intestinal wall. Muscularis/mucosal ratio was 1:1. The intestinal submucosa was slightly irregular, thickened and hyperechoic suggestive of low grade, chronic disease. No concerning lymphadenopathy was visible. No evidence of obstruction was present. Chronic inflammatory bowel disease is likely with a low possibility of an early neoplastic event such as lymphoma. Full thickness tissue biopsies via open laparotomy, ideally guided by intraoperative ultrasound in order to obtain the most representative mural sample, would be necessary to rule out this possibility.

Pancreas

The **pancreas** was enlarged and irregular with undulating contour and course architecture. Dilated duct was noted. This change is consistent with remodeling and likely active inflammation. The left limb measured 1.5 cm. The right limb of the pancreas was significantly enlarged with dilated duct, measuring 0.28 cm and width of 0.68 cm.

Free Abdomen

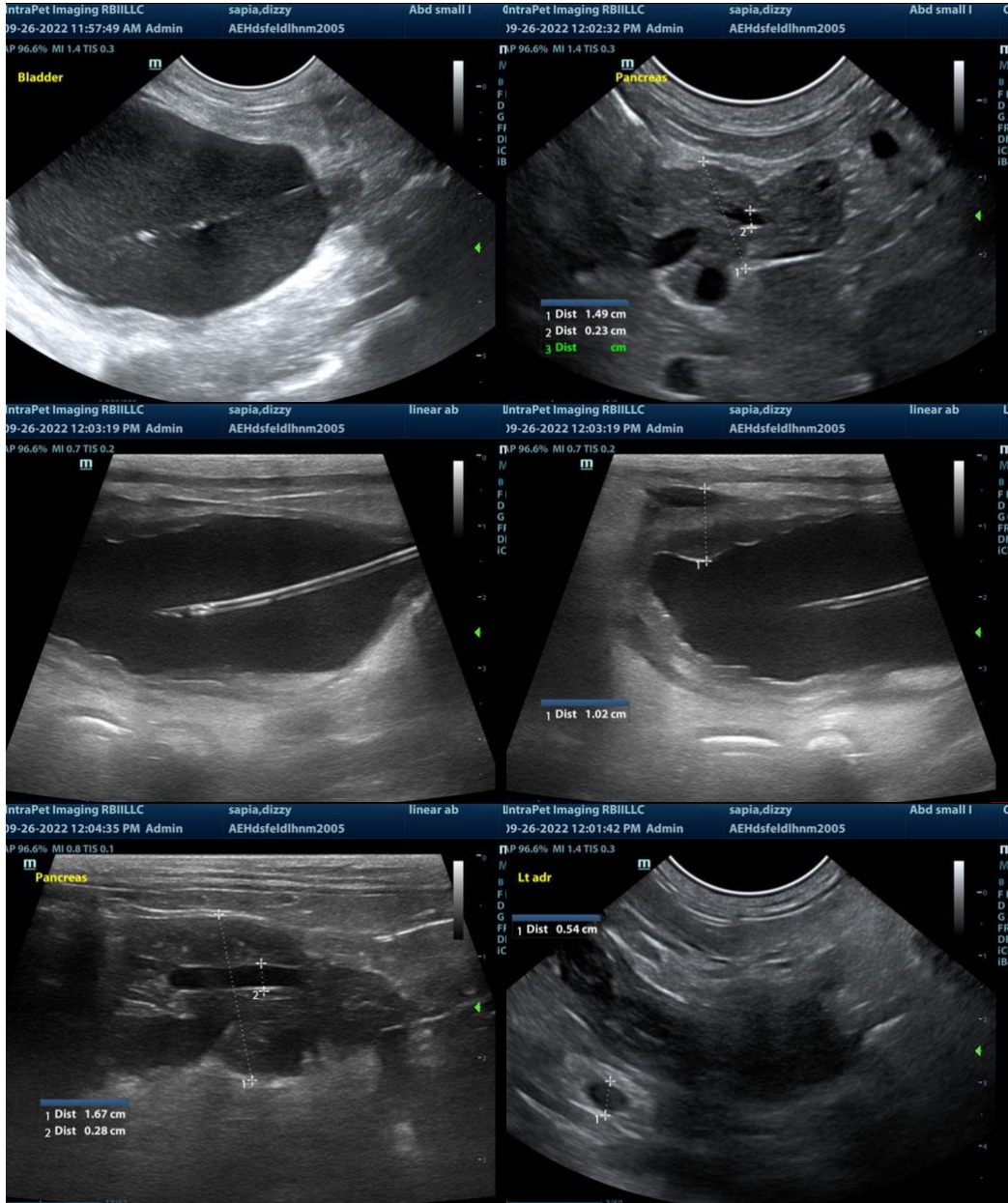
A minor amount of **free fluid** was noted between the liver lobes.

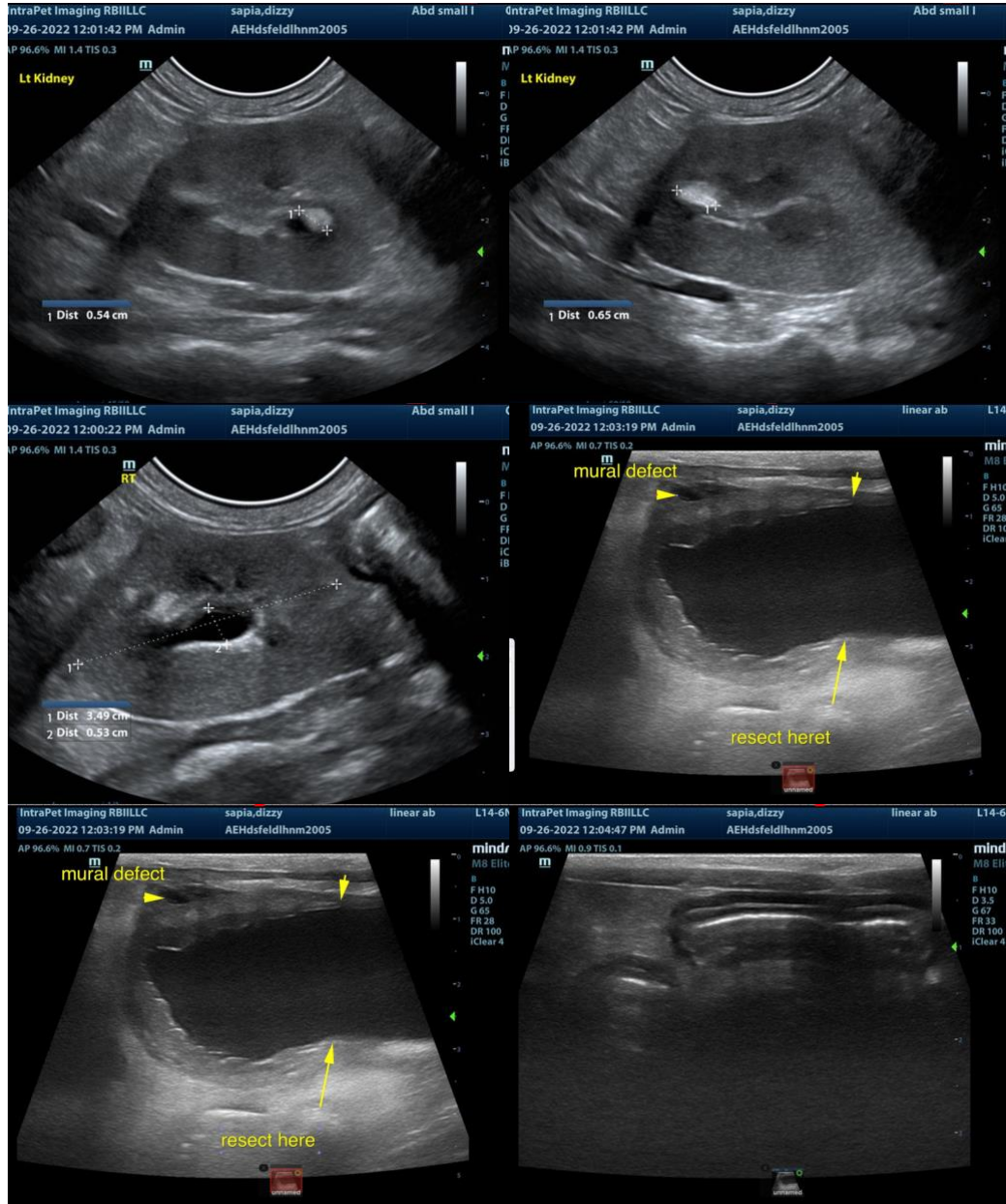
ULTRASONOGRAPHIC FINDINGS

- Moderate chronic renal changes with pyelectasia and dystrophic mineralization- progressed from the prior sonogram
- Chronic cystitis urinary bladder pattern with suspect ventral mural defect- possible leakage and uroabdomen
- Chronic hepatic changes
- Minor amount of free fluid between the liver lobes
- Enlarged irregular pancreas with dilated duct- chronic active pancreatitis is likely
- IBD pattern

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

FNA of the liver and pancreas would be ideal in this patient. Surgical resection of the apical ½ of the urinary bladder may prove fruitful in order to remove the chronic changes in the bladder wall, as well as the ventral mural defect. The mural defect may be the source of free fluid, as leakage from the apical ventral bladder wall is a possibility. At that time, full thickness biopsies of the liver, GI tract and pancreas could be considered, as well as further investigation to the cause of free fluid formation. No overt evidence of neoplasia.





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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