

**DATE PRESENTING CLINICAL SIGNS**

11/29/21

History: bladder and kidney stones, liver enzymes high, obese.

PATIENT

Ruby Jarzynski

Current Medications: Tramadol 50mg- 1/2 tablet BID. Started on 11/10/21, Carprofen 25mg- 1 tablet SID. Started on 11/10/21.

Lab Results: AlkP 682, ALT 148, normal T4, elevated precision PSL, CBC WNL. USG 1.038 with protein in the urine.

Date of Previous IntraPet Ultrasound: No previous IntraPet scans.

Sedation: Declined.

Stat Report: Not requested.

SPECIES

Canine

BREED

Toy Poodle Mixed breed

SEX

Female, spayed

AGE

5/7/2012

WEIGHT

15 lbs.

INTERPRETED BYAndrea Nicastro, DVM,
Diplomate ACVIM
(Small Animal Internal
Medicine)**IMAGING PERFORMED BY**

Rachel Brillhart RDMS

HOSPITAL NAME

Madonna VC

REFERRING VET

Dr. Cangro

INVOICE

12602

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**Urinary System**

The urinary bladder is moderately distended. The wall is normal in thickness with a smooth mucosal surface. A small aggregation of mineralized sand vs tiny calculi is observed within the lumen. The region of the trigone is normal. Mineralized sand vs small distinct calculi is observed within the urethral lumen.

The left kidney is normal size (4.32 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal loss of corticomedullary distinction. A hyperechoic medullary band is observed adjacent to the corticomedullary junction. Several nephroliths are visualized. There is no evidence of pyelectasia, infarcts or hydroureter. Renal vasculature is normal.

The right kidney is normal size (4.76 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal loss of corticomedullary distinction. A hyperechoic medullary band is observed adjacent to the corticomedullary junction. Several nephroliths are visualized. There is no evidence of pyelectasia, infarcts or hydroureter. Renal vasculature is normal.

Adrenal Glands

The left adrenal gland is mildly enlarged (0.50 cm at cranial pole) (0.58 cm at caudal pole) (1.54 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 (0.63 cm at cranial pole) (0.55 cm at caudal pole) (2.38 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 (1.13 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 enlarged with rounded peripheral contours. The parenchyma is hyperechoic relative to the spleen and subtly heterogeneous in appearance. No distinct focal lesions are observed. Vascular and biliary tracts are of normal volume with no evidence of congestion. The gall bladder lumen is distended. The wall is normal in thickness. A moderate amount of aggregated echogenic debris/sludge is observed within the lumen, some of which is partially dependent and some of which is adherent or suspended. 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 prominent in size with minimal deviation from the normal peripheral contours. The parenchyma is hyperechoic relative to surrounding omental fat and mottled in appearance. No distinct focal lesions are observed. The pancreatic duct is not overtly dilated.

Free Abdomen

There is no evidence of free fluid. The abdominal lymph nodes are normal/not visible.

ULTRASONOGRAPHIC FINDINGS

Primary Findings:

- Minor age-related renal changes with non-obstructive nephrolithiasis.
- Urinary bladder and urethral sand vs tiny calculi.
- The diffuse hepatic changes are non-specific and could be consistent with vacuolar hepatopathy, regenerative nodular hyperplasia, and/or age-related remodeling. Inflammatory and infiltrative disease are considered less likely.
- Gallbladder debris/sludge. Differentials include cholestasis or early mucocele formation.

Secondary Findings:

- Mild left adrenomegaly.
- The pancreatic changes are most consistent with age-related remodeling/fibrosis +/- concurrent pancreatitis. Correlation with clinical findings is recommended.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- Given the presence of proteinuria, a UPC is recommended.
- A fine needle aspirate of the liver can be considered to rule out infiltrative neoplasia. Clotting status should be assessed prior to aspiration. Alternatively serial monitoring (i.e., every 3-4 months) of the patient's liver values can be considered. If liver values continue to rise, repeat sonography +/- hepatic tissue sampling can be considered.
- Given the gall bladder changes, consider initiation of Ursodiol therapy with serial sonographic monitoring (i.e., every 6-8 weeks) to assess for progression to a fully-formed mucocele.
- Consider testing for hyperadrenocorticism with a low-dose dexamethasone suppression test or ACTH stimulation test if clinical signs (i.e., PU/PD) develop in the future.





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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