

**DATE**

12/5/22

PRESENTING CLINICAL SIGNS

History: Patient has an elevated ALP.

PATIENT

Pouilly Heyman

Current Medications: Enrofloxacin 68mg ½ BID started 11/23 for 10 days, Denamarin Advanced small dog ¼ SID started 10/29.

Lab Results: See attached.

Date of Previous IntraPet Ultrasound: No previous.

SPECIES

Canine

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

Imaging Performed By: Andi Parkinson, BS, RDMS.

BREED

Maltese

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**SEX**

Intact Male

Urinary System

Urinary bladder is adequately distended with anechoic contents. No masses or inflammatory changes are observed. The urinary bladder, trigone and visible pelvic urethra are normal in thickness with a smooth mucosal surface. Mineral foci/small cystolith is present within the urethral lumen at the level of the prostate.

AGE

8/22/10

The prostate appears normal for a neutered dog, although this patient is reportedly intact.

WEIGHT

12 Pounds

Left kidney is normal is size (3.86 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia or infarcts observed. Non-obstructive areas of mineralization/nephroliths are noted.

Right kidney is normal is size (3.85 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia or infarcts observed. Non-obstructive areas of mineralization/nephroliths are noted.

INTERPRETED BYBeth Johnson, DVM
DACVIM**Adrenal Glands**

Left adrenal gland is normal in size (1.46 cm long x 0.57 cm at cranial pole and 0.64 cm at caudal pole), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

HOSPITAL NAME

Lake Shore PH

Right adrenal gland is normal in size (1.31 cm long x 0.66 cm at cranial pole and 0.54 cm at caudal pole), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

REFERRING VET

Dr. Ashley

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.

INVOICE

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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 moderately distended with anechoic bile as well as suspended and gravity dependent echogenic debris. The wall is smooth without visible thickening. There is no evidence of cystic or CBD dilation. There is no evidence of effusion or inflammation.

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. Hyperechoic mucosal fogging or speckling is noted. 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 and layering. Contents are consistent with normal formed feces and gas.

Pancreas

The observed pancreas 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 evidence of peritoneal effusion. There is no apparent lymphadenopathy.

ULTRASONOGRAPHIC FINDINGS

- Mucosal speckling – Mucosal speckling is often present with inflammatory bowel disease (IBD). It is not specific for type or severity of disease. Mild speckling change can occur as a normal patient variant in the post-prandial state.
- Intraurethral mineral/cystolith at the level of the prostate
- Bilateral nonobstructive nephrolithiasis in the kidneys
- Gallbladder debris - Cholecystic debris is of unknown clinical significance. It can be seen with biliary stasis from fasting or illness. Cholecystic debris is not necessarily related to hepatobiliary disease. Echogenic bile is most commonly an incidental finding in dogs and should be interpreted in combination with clinical signs such as nausea, inappetence, cranial abdominal discomfort and/or laboratory changes such as increased ALP and/or increased Tbili.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

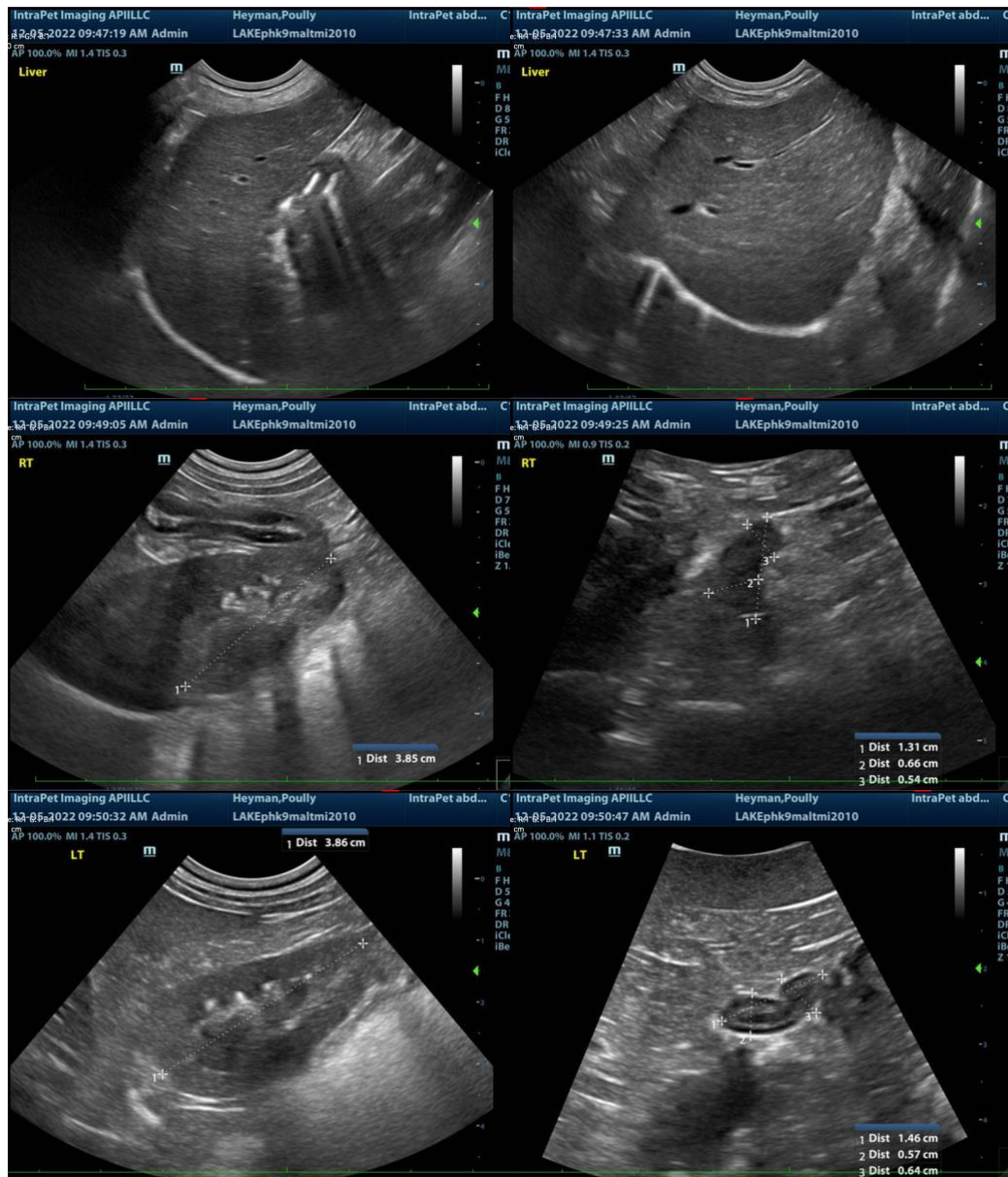
The ultrasound findings described above are all mild in appearance and likely a combination of age-related/benign change overall. However, given this patient's reportedly increased ALP, Hepatic nutraceuticals, including Ursodiol could be considered given the mild gallbladder debris, with monitoring of enzymes for improvement.

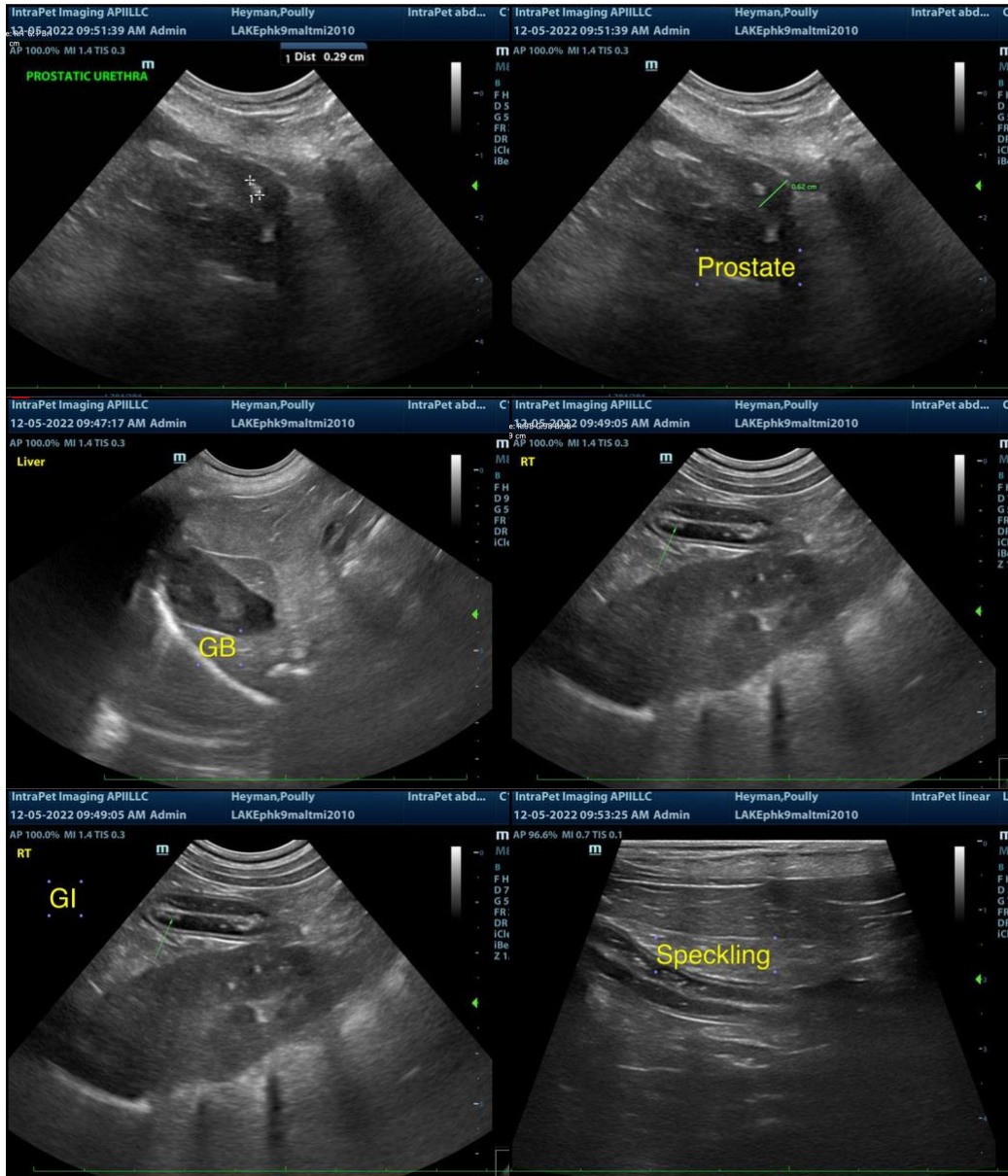
Additionally, if clinical signs of hyperadrenocorticism are present, including PU/PD, polyphagia, etc., testing for hyperadrenocorticism in the form of a LDDST could also be considered, as normal appearing adrenal glands does not rule out hyperadrenocorticism.

Monitoring of this patient for clinical signs of stranguria, pollakiuria, etc., is recommended, given the

intraurethral mineral. However, without clinical signs and/or signs of concurrent infection, further intervention may not be necessary.

Similarly, if GI signs, including diarrhea, weight loss, progressively low albumin, etc. are present, further investigation of the mucosal speckling, beginning with a gastrointestinal malabsorption panel (including cobalamin, folate, TLI and PLI) to Texas A&M GI Laboratory for further evaluation of GI and pancreatic function could be considered. However, further testing may not be warranted without supporting clinical signs, as this can be a normal variant, especially postprandial.





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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