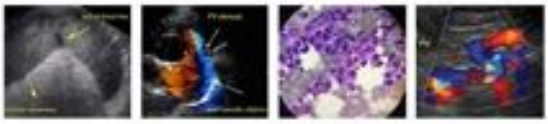


PATIENT

Lilly Pemberton

SPECIES

Canine

BREED

Mixed breed

SEX

Femalel, spayed

AGE

14 Years

WEIGHT

38.8 Pounds

INTERPRETED BY

Andrea Nicastro, DVM, Diplomate ACVIM (*Small Animal Internal Medicine*)

IMAGING PERFORMED BY

Loetitia Saint-Jacques, RVT

HOSPITAL NAME

Advanced PetCare of Nevada

REFERRING VET

Dr. Behrens

INVOICE

14597

DATE

2/14/23

PRESENTING CLINICAL SIGNS

History: History: Tremors in hindlimbs, frequent urination and urinating in the house, excessive thirst Reason for Ultrasound: Pendulous abdomen, elevated BUN, hypochloremia, elevated ALT, ALP, GGT, cholesterol, triglyerides, lipase, cPL, proteinuria, thrombocytosis; Ddx: hyperadrenocorticism, neoplasia, pancreatitis

BUN 37, ALT 310, ALP 4861, GGT 108, severely elevated spec cPL. USG 1.022, 3+ proteinuria. T4 normal, 4DX negative.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder wall is normal in thickness and the mucosal surface is smooth. The bladder lumen is moderately distended with anechoic urine. No masses, inflammatory changes or calculi are observed. The region of the trigone and the visible portion of the proximal urethra are normal.

The left kidney is normal size (6.24 cm in length); normal shape and architecture with smooth peripheral margins. The cortex is isoechoic relative to the spleen. There is a normal 1:3 cortex to medulla ratio with mild loss of corticomedullary distinction. Trace pyelectasia is present. There is no evidence of nephroliths, infarcts or hydroureter. A 0.62 cm cystic structure is observed at the corticomedullary junction at the lateral aspect.

The right kidney is normal size (6.65 cm in length); normal shape and architecture with smooth peripheral margins. The cortex is isoechoic relative to the spleen. There is a normal 1:3 cortex to medulla ratio with mild to moderate loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter.

Adrenal Glands

The left adrenal gland is mildly enlarged (0.63 cm at cranial pole) (0.83 cm at caudal pole) with a slightly prominent caudal pole. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

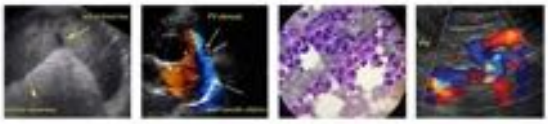
The right adrenal gland is normal size (1.00 cm at cranial pole) (0.56 cm at caudal pole) (2.40 cm in length) with a normal shape and smooth peripheral contours. A 0.21 cm hyperechoic focus is observed at the cranial to mid-aspect. The remaining glandular echogenicity and detail are unremarkable. The phrenicoabdominal vein and surrounding vasculature are normal.

Spleen

The spleen is normal in size (1.27 cm in width at the level of the hilus) with a normal capsular contour. There is appropriate echogenicity and echotexture. A few small irregular hyperechoic nodules are observed throughout the organ. Splenic vasculature is normal.

Liver

The liver is subjectively enlarged with slightly swollen peripheral contours. The parenchyma is isoechoic relative to the spleen and diffusely homogeneous 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 thin and smooth. A moderate to large amount of aggregated echogenic suspended sludge in a partially stellate pattern is observed within the lumen. The cystic and



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common bile ducts are normal/not seen. The duodenal papilla is normal in size (0.44 cm in width).

Gastrointestinal

The stomach and intestine are free of stasis and exhibit normal peristaltic activity. The gastric lumen is mildly distended with ingesta. 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 segmentally dilated with chyme. 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 normal in size with normal curvilinear peripheral contours. The parenchyma is largely isoechoic relative to surrounding omental fat and slightly mottled in appearance. The pancreatic duct is visible but not overtly dilated. There is no evidence of peripancreatic inflammation or effusion.

Free Abdomen

Trace free fluid is observed. A 1.72 cm cystic lymph node is observed in the right cranial quadrant.

ULTRASONOGRAPHIC FINDINGS

Primary Findings:

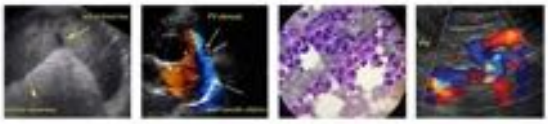
- The gallbladder changes are consistent with a developing mucocele.
- The hepatic parenchymal changes are non-specific and may be secondary to vacuolar hepatopathy (i.e., idiopathic, endocrine), inflammatory disease (i.e., bacterial cholangiohepatitis, chronic hepatitis), hepatotoxicosis (i.e., copper), or other hepatopathy.
- Trace ascites.

Secondary Findings:

- Mild bilateral age-related renal changes.
- Mild left adrenomegaly. The hyperechoic focus in the right adrenal gland may represent a benign incidental finding. However, an emerging tumor is possible although considered less likely.
- The pancreatic changes are most consistent with age-related parenchymal remodeling, potentially secondary to a prior inflammatory episode, early fibrosis or chronic pancreatitis.
- The significance of the cystic lymph node in the right cranial quadrant is unclear. It may represent a reactive node or less likely, emerging neoplasia.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- Given the gall bladder changes, Ursodeoxycholic acid (Ursodiol) at 10-15 mg/kg once a day is recommended. Serial sonographic monitoring (e.g., every 6-8 weeks) of the gall bladder is recommended to assess for progression to a fully-formed mucocele.



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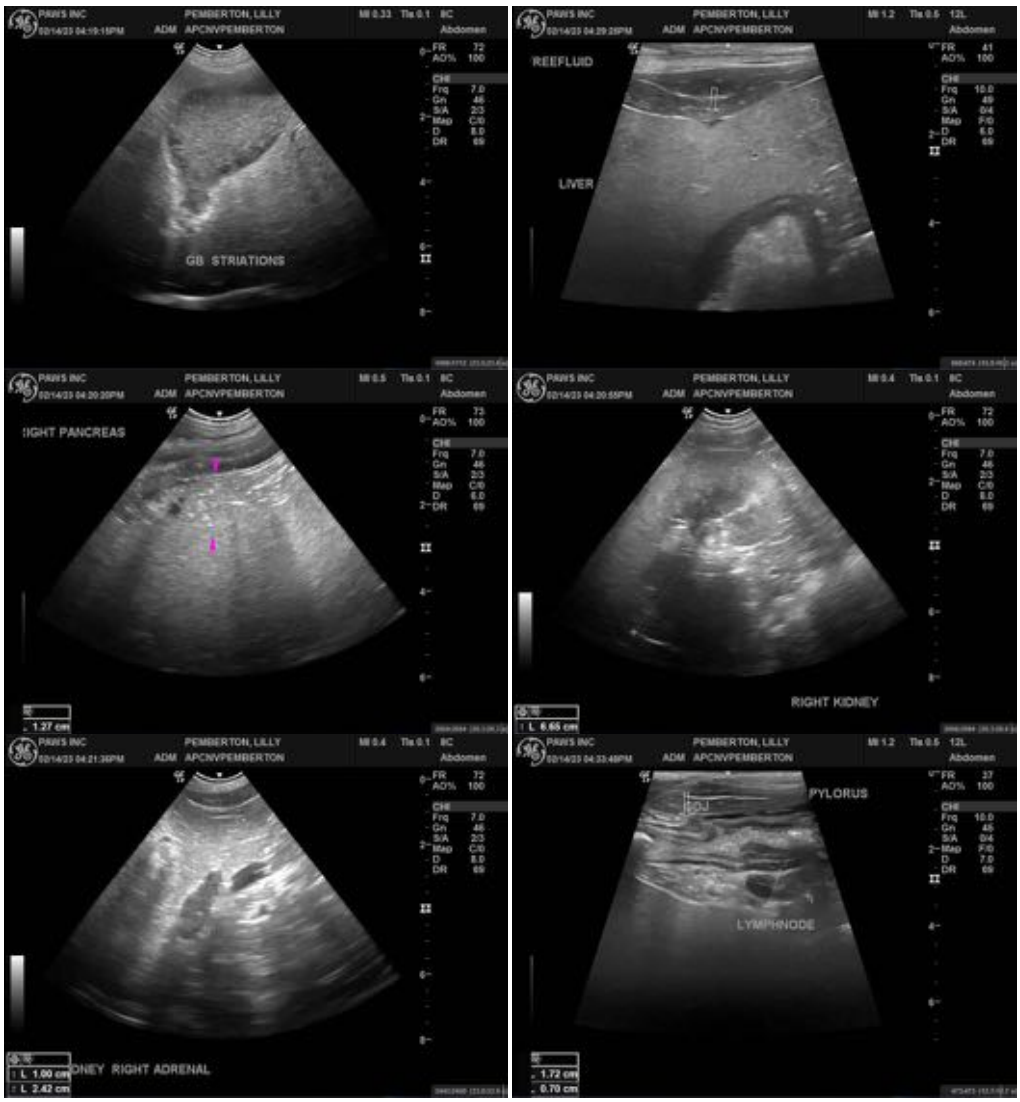
- Consider empirical treatment for cholecystitis (i.e., secondary to an emerging mucocele). Therapy could include broad spectrum antibiotics +/- Denamarin. If liver values do not begin to improve within 7-10 days of initiating therapy, antibiotics should be discontinued.
- Given the mild PU/PD, consider a urine culture and sensitivity. If results are negative and proteinuria persists, a UPC should be performed.
- Testing for Cushing's disease (i.e., low-dose Dexamethasone suppression test) can also be considered.



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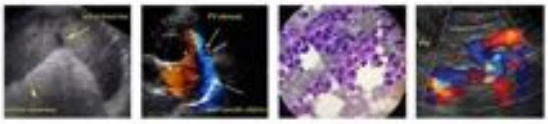

IMAGING PERFORMED BY
pawsonography@gmail.com 530-786-8340

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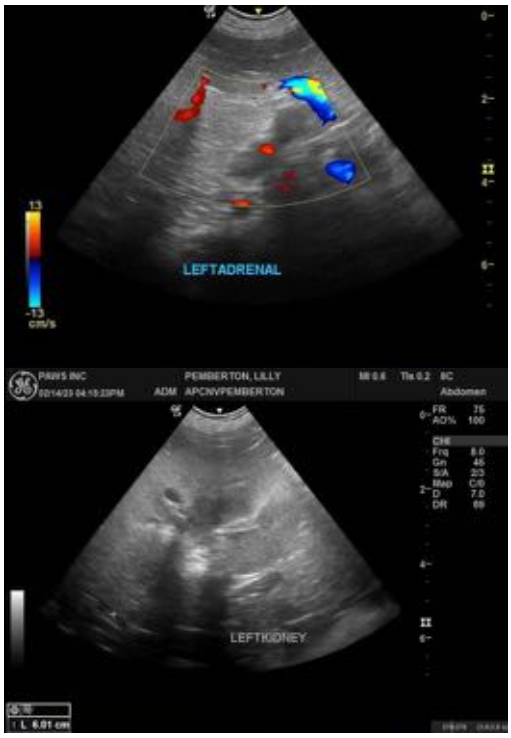

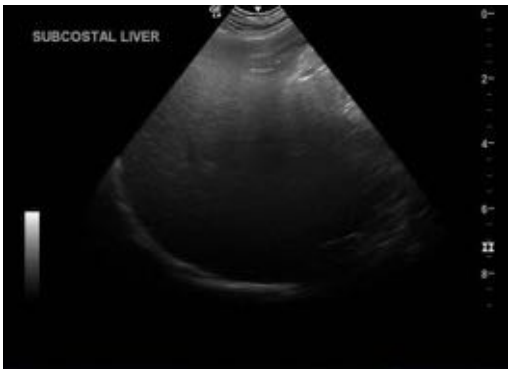

The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

Andrea Nicastro, MPH, DVM, Diplomate DACVIM (Small Animal Internal Medicine)
info@SonoPath.com