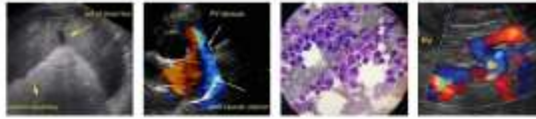


PATIENT

Lucy Johnson

SPECIES

Canine

BREED

Lhasa

SEX

FS

AGE

13 years

WEIGHT

35

INTERPRETED BY

R. McKenzie Daniel, DVM, DABVP (Canine and Feline)

IMAGING PERFORMED BY

Loetitia Saint-Jacques, RVT

HOSPITAL NAME

Brighton Greens VH

REFERRING VET

Dr. Robin Janeway

INVOICE

12975

DATE

1/6/22

PRESENTING CLINICAL SIGNS

Age: 13yr Weight in #: 35.20 Breed: Lhasa Apso History: Has chronic pododermatitis mainly LF foot, atopy, hypertension and liver disease See previous U/S history from 10/21: • Static chronic renal changes with medullary mineralization • Similar appearing left adrenal nodule • Right adrenal mass with parenchymal mineralization • Chronic hepatopathy with hypoechoic parenchymal nodules and focal parenchymal cyst – subjectively static compared to previous ultrasound. • Probable benign splenic nodules – suggestive of benign myelolipomas, hyperplasia, or potential chronic infarcts or emerging mineralization. Patient is currently on: Amlodipine 2.5mg 1/2TSID Atopica 50mg 1CSID Ketoconazole 50 mg PO SID Ursodiol 250mg 1TSID Denamarin 225mg 1TSID Gabapentin 100mg BID Physical exam findings: obesity, distended abdomen Abnormal CBC values: WBC 15,600, increased platelets, Abnormal Chemistry Values: ALT 120, ALP 2591, GGT 18, BUN 33 (H), Cr 1.6 (high normal (1.63)glucose 177, PSL 316 T4 WNL,. Abnormal UA Values: UA USG 1.026, 1+ proteinuria Radiograph Findings(email radiographs if available): None performed Reason for Ultrasound: follow up U/S from 3 months ago

Urinary System

The urinary bladder was normal in size and tone. No evidence of Inflammatory or neoplastic mural criteria was noted. Primarily anechoic urine with focal areas of dependent mineral were present. The urethra exhibited normal structure and tone to a depth of 3.0 cm.

The area of the aortic trifurcation was free of pathology.

Normal size and margination were present in the kidneys. A normal 1:3 cortex / medulla ratio was maintained. The medulla and cortices were uniform in texture with some increased echogenicity and mild loss of corticomedullary symmetry and definition expected for the age of the patient. Focal areas of nonobstructive medullary to peri-pelvic mineral were present. No evidence of pelvic dilation was present. The left kidney measured 5.3 cm in length. The right kidney measured 5.5 cm in length.

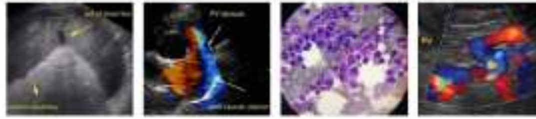
Adrenal Glands

Previously noted cranial left adrenal nodule was present. The nodule was essentially static in size, measuring approximately 1.4 cm in diameter. The nodule exhibited similar appearing primarily uniform echogenic parenchyma with focal, small, hyperechoic intra-lesion nodule. No evidence of vascular invasion associated with the left adrenal nodule was noted. The overall left adrenal gland measured 1.4 cm width at the cranial pole and 0.78 cm width at the caudal pole.

Previously noted nonhomogeneous to mineralized right adrenal mass was present. The mass appeared to be mildly larger in size compared to the previous ultrasound exam, measuring 3.6 cm x 2.2 cm. Overt evidence of vascular invasion was not definitively evident, yet cannot be definitively excluded. For comparison, the previous measurement of the right adrenal mass was 3.0 cm x 2.1 cm.

Spleen

The spleen exhibited primarily finely textured and homogenous parenchyma which was hyperechoic to the liver and renal cortical parenchyma. Multiple, echogenic, non-expansive nodules exhibiting subtle distal acoustic shadowing were present throughout the cranial to caudal parenchyma. The capsule was smooth and regular without apparent expansion. The splenic vasculature at the hilus was normal in volume with no evidence of congestion or thrombosis. Acute to chronic inflammatory or



PATIENT

Lucy Johnson

SPECIES

Canine

BREED

Lhasa

SEX

FS

AGE

13 years

WEIGHT

35

INTERPRETED BY

R. McKenzie Daniel, DVM, DABVP (Canine and Feline)

IMAGING PERFORMED BY

Loetitia Saint-Jacques, RVT

HOSPITAL NAME

Brighton Greens VH

REFERRING VET

Dr. Robin Janeway

INVOICE

12975

DATE

1/6/22

neoplastic changes were not noted. The echogenic nodules tend to trend benign and are most consistent with benign hyperplasia or myelolipomas.

Liver/ Gallbladder

The liver exhibited mild generalized enlargement with generalized increased parenchyma echogenicity and moderate coarse echotexture. Similar appearing multifocal, variably sized, hypoechoic intraparenchymal nodules were present. Moderate, hyperechoic to potentially mineralized gallbladder debris was present. No evidence of gallbladder or peripheral inflammation was present. The cystic and common bile ducts were normal.

Gastrointestinal

The stomach presented intact wall layering with a normal wall layer ratio. The lumen of the stomach was empty with no signs of ileus, obstruction, or foreign material.

The small intestine presented intact wall layering with segmental to generalized propensity for nonspecific mildly hyperechoic mucosal speckling to striations.

Normal visible colon wall layers were present with apparent formed feces in lumen.

Pancreas

The pancreas was normal in size and contour with isoechoic to heterogeneous parenchyma compared to adjacent omentum. No signs of active inflammation or neoplasia.

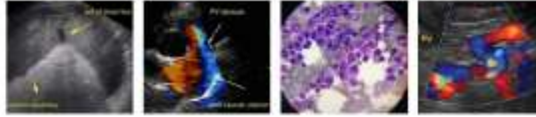
Free Abdomen

No overt lymphadenopathy or peritoneal effusion was present.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- Focal dependent urinary bladder mineral
- Chronic renal changes with nonobstructive medullary and peri pelvic mineral
- Essentially static left adrenal nodule
- Mildly progressive mineralized right adrenal mass
- Chronic hepatopathy with multifocal similar appearing hypoechoic parenchymal nodules
- Moderate hyperechoic to potential mineralized gallbladder debris
- Static benign splenic nodules - mineralization, myelolipomas, nodular hyperplasia, or previous infarctions possible
- Nonspecific small intestinal mucosal speckling to striations



PATIENT

Lucy Johnson

SPECIES

Canine

BREED

Lhasa

SEX

FS

AGE

13 years

WEIGHT

35

INTERPRETED BY

R. McKenzie Daniel, DVM, DABVP (Canine and Feline)

IMAGING PERFORMED BY

Loetitia Saint-Jacques, RVT

HOSPITAL NAME

Brighton Greens VH

REFERRING VET

Dr. Robin Janeway

INVOICE

12975

DATE

1/6/22

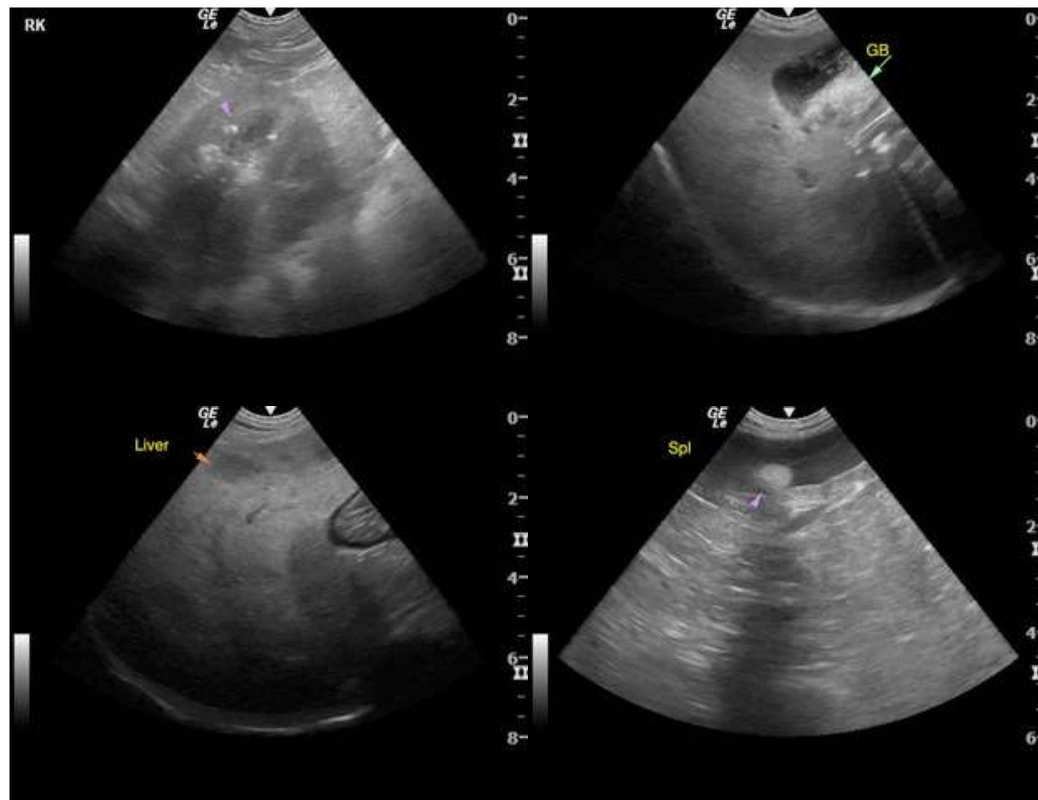
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

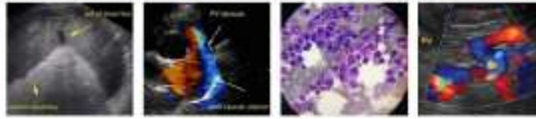
This patient is likely passing small amounts of mineral from the kidneys into the urinary bladder. Further renal staging to include urine C/S and protein: creatinine ratio on sterile urine sample may be considered.

Hepatosupportive medications +/- screening hepatic FNA, assuming normal clotting status and using a 25-gauge needle, is warranted.

The small intestinal mucosal speckling to striations is nonspecific yet at times has been associated with enteritis or potential protein losing enteropathy. This may also be an incidental or age-related finding. Monitoring of albumin levels may be considered.

Continued periodic monitoring of the right adrenal mass and left adrenal nodule Is warranted If additional diagnostics or therapeutic options are not possible.





PATIENT

Lucy Johnson

SPECIES

Canine

BREED

Lhasa

SEX

FS

AGE

13 years

WEIGHT

35

INTERPRETED BY

R. McKenzie Daniel, DVM, DABVP (Canine and Feline)

IMAGING PERFORMED BY

Loetitia Saint-Jacques, RVT

HOSPITAL NAME

Brighton Greens VH

REFERRING VET

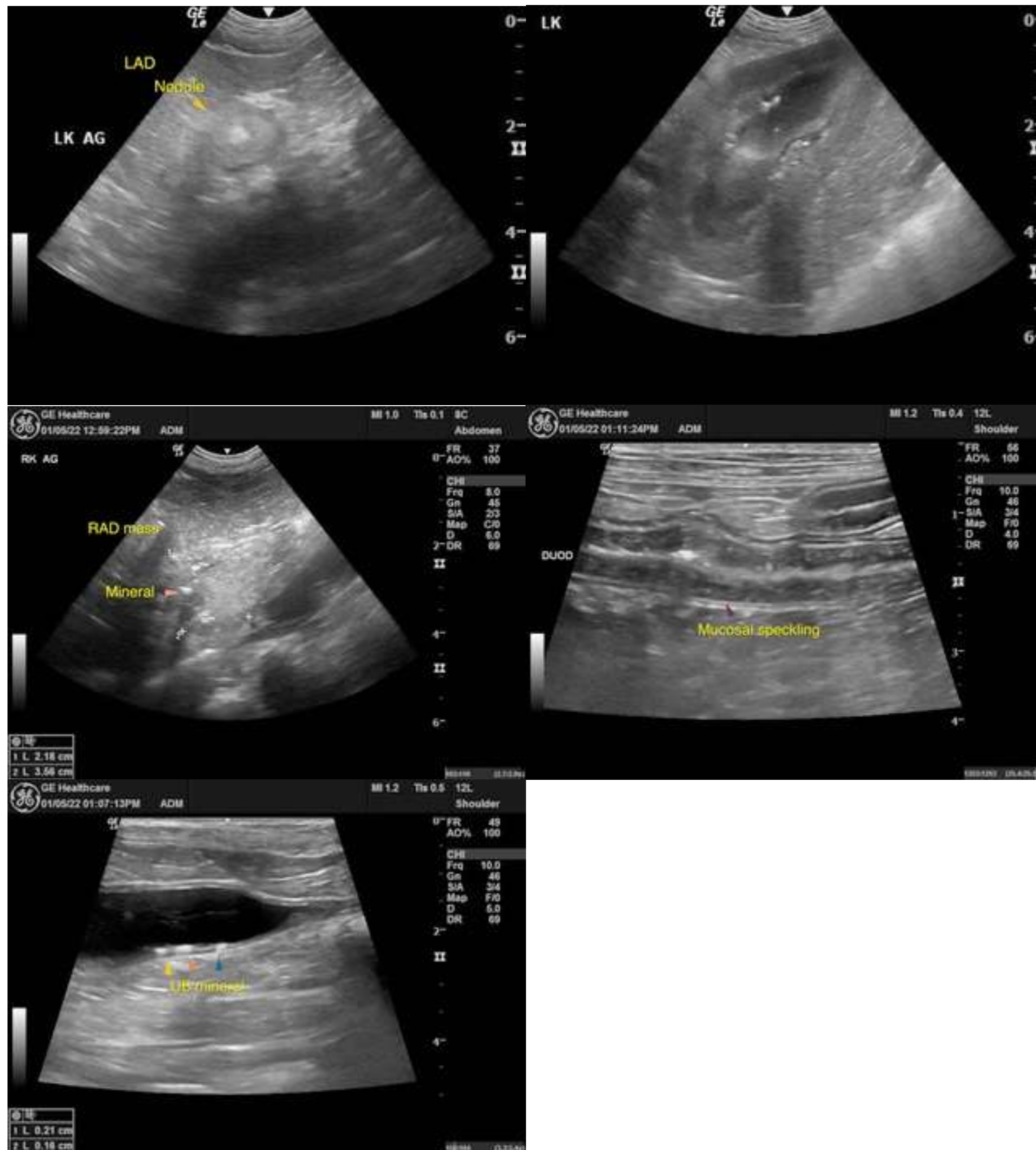
Dr. Robin Janeway

INVOICE

12975

DATE

1/6/22



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.

R. McKenzie Daniel, DVM, DABVP (Canine / Feline Practice)
info@SonoPath.com