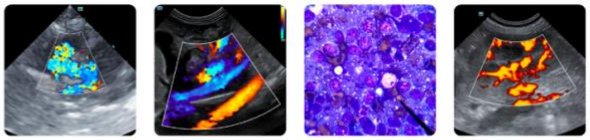


PATIENT

Lady Howe

SPECIES

Canine

BREED

Cocker Spaniel Mix

SEX

Spayed Female

AGE

12

WEIGHT

16.8 pounds

INTERPRETED BY

Alicia Angosto Guerrero, DMV, PgDip, MSc.

IMAGING PERFORMED BY

Ryan Berger LVT

HOSPITAL NAME

Waterville Veterinary Clinic

REFERRING VET

Dr. James Gilchrist DVM

INVOICE

14190

DATE

03/10/26

PRESENTING CLINICAL SIGNS

- Presents on 2/27 for evaluation of weight loss, poor hair regrowth, and lethargy.
- The owner first noticed the weight loss and that her hair has not grown back properly since being groomed two months ago. The owner reports that Lady has been drinking more water than usual and sleeping a lot, though she still has a good appetite.
- The patient has also been experiencing intermittent diarrhea. The owner has been administering a probiotic.
- Bloodwork performed approximately six months ago reportedly showed elevated liver enzymes. A heart murmur was also diagnosed at a previous visit.

Abnormal PE/Chem/CBC/UA Results:Polydipsia, weight loss, alopecia, and muscle atrophy are concerning for an underlying endocrine disease. Differential diagnoses include hyperadrenocorticism (Cushing's disease), diabetes mellitus, and chronic kidney disease. Liver disease is also a consideration given the history of elevated liver enzymes. BW on 2/28: Anemia - 37.4% hematocrit, increased WBC: 17.8, Neut: 12.2; Chemistry - low albumin: 2.1, increased globulin: 4.5, ALT 300, ALP 4745, GGT 70, Lipase 896

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The bladder lumen is moderately distended, and the wall of the urinary bladder appears thin and smooth. The urine is anechoic. Normal appearance of the bladder neck and proximal urethra. There are no calculi and no evidence of inflammatory or neoplastic changes.

The left kidney is normal in shape and size: 5.18×2.97 cm, and the thickness of the cortex is 0.65 cm in the sagittal plane.
The right kidney is normal in shape and size: 5.35×3.18 cm, and the thickness of the cortex is 0.68 cm in the sagittal plane.

The cortex demonstrates normal echogenicity. The corticomedullary ratio is normal and corticomedullary definition is preserved. There is no evidence of pyelectasia, nephroliths, or hydronephrosis.

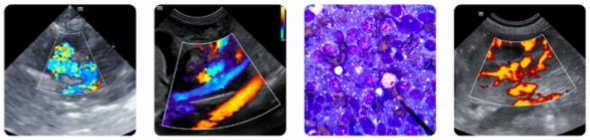
Adrenal Glands

Both adrenal glands show a globose shape. Dorsoventral diameters measured in the sagittal plane (maximum measurements from three acquisitions): the left adrenal gland measures 1.18 cm at the cranial pole and 1.10 cm at the caudal pole. The right adrenal gland measures 1.38 cm at the cranial pole and 1.29 cm at the caudal pole.

Spleen

Splenic thickness is 0.70 cm. The parenchyma demonstrates multiple diffuse punctate hyperechoic foci (“sparkling spleen”).

Liver



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The liver is subjectively normal in size, with sharp edges and a regular contour. The liver parenchyma appears isoechoic compared to the falciform fat, with a hyperechoic focus measuring 1.01×1.8 cm and a few additional small hyperechoic areas. No hepatic lymphadenopathy is observed.

The gallbladder lumen is moderately distended. The wall shows apparent mucous gland hyperplasia, and the lumen contains a large amount of biliary sludge. No dilation of the cystic duct or common bile duct is observed.

Gastrointestinal

The stomach is empty and folded, with mural thickness (1.86 mm) and preserved wall layering. The pylorus measures 3.44 mm.

Duodenum: 4.38 mm.
Jejunum: 3.99 mm, with normal wall layering.

No signs of inflammation, ileus, or foreign material are identified.

Colon: 1.89 mm, with formed feces present in the descending segment.

Pancreas

The evaluated pancreatic regions do not show evidence of overt inflammation or neoplastic disease.

Free Abdomen

No sonographic evidence of abdominal effusion, peritonitis, or lymphadenomegaly is identified. The lymph node at the iliac trifurcation appears normal.

PRIMARY FINDINGS

- Marked bilateral adrenal enlargement with globose morphology.
- Focal hyperechoic hepatic nodule with additional small hyperechoic areas.
- Large amount of biliary sludge with apparent mucous gland hyperplasia.

SECONDARY FINDINGS

- Diffuse punctate hyperechoic foci within the splenic parenchyma.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The most significant ultrasonographic finding is marked bilateral adrenal enlargement with a globose morphology. The dorsoventral measurements of both adrenal glands are clearly above accepted reference limits for dogs of this size, in which adrenal thickness typically remains ≤0.75–0.80 cm. The bilateral and relatively symmetric enlargement strongly supports adrenal cortical hyperplasia, most consistent with pituitary-dependent hyperadrenocorticism in the context of the patient's clinical signs and biochemical abnormalities.

The splenic parenchyma contains multiple diffuse punctate hyperechoic foci, producing the characteristic "sparkling spleen" appearance described in dogs with hyperadrenocorticism. Histologically, this finding is believed to reflect steroid-induced vascular and parenchymal alterations, including splenic sinusoidal congestion, microvascular mineralization, and lipid deposition within

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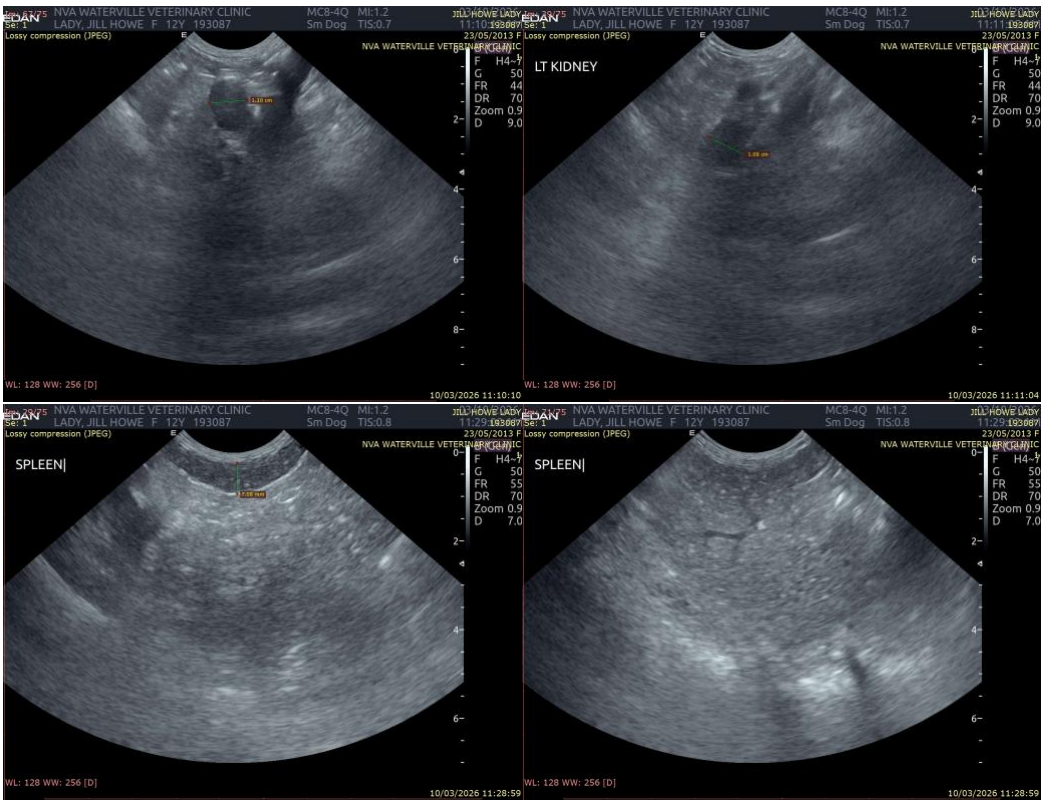
macrophages. This ultrasonographic pattern has been repeatedly reported in association with chronic glucocorticoid excess and therefore represents a supportive but not pathognomonic finding for Cushing's disease.

The liver is normal in size and overall echogenicity but contains a focal hyperechoic nodule (1.01×1.8 cm) and several smaller hyperechoic areas. In the context of suspected hyperadrenocorticism, these lesions are most compatible with nodular hyperplasia associated with steroid-induced vacuolar hepatopathy, a common hepatic response to chronic glucocorticoid exposure. Diffuse hepatomegaly or marked parenchymal hyperechogenicity may be absent in early or moderate stages of steroid hepatopathy.

The gallbladder contains a large amount of biliary sludge with apparent mucous gland hyperplasia, findings that may occur secondary to steroid-associated alterations in bile composition and gallbladder motility. No evidence of biliary obstruction is present.

Recommendations

- Endocrine confirmation of hyperadrenocorticism is recommended.
- Periodic monitoring of hepatic enzymes and gallbladder status is advisable, as hepatobiliary changes and biliary sludge are commonly associated with chronic glucocorticoid excess.
- If clinical signs or laboratory abnormalities progress, follow-up abdominal ultrasound may be considered to monitor hepatic nodules and gallbladder contents.



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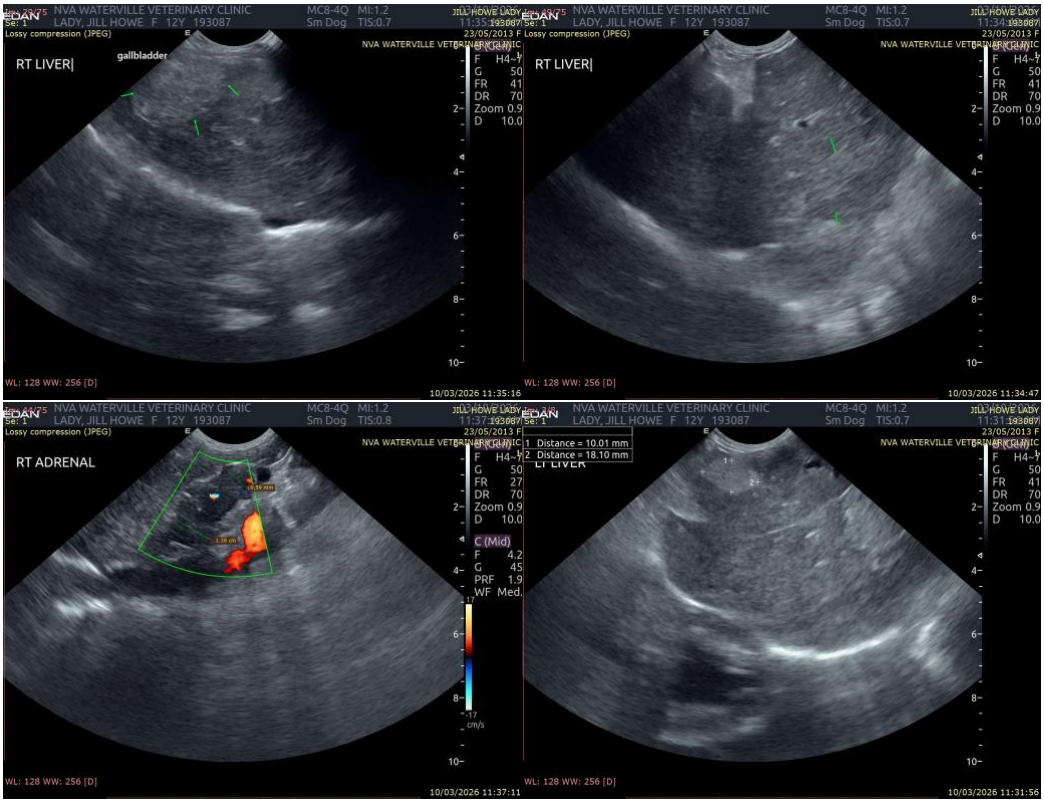

The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

Alicia Angosto Guerrero, DMV, PgDip, MSc.

info@SonoPath.com