



PATIENT	PRESENTING CLINICAL SIGNS
Coraline Hendershot	Increased liver values (AST = 218, ALT = 173, Alk Phos = 618). Rads NSF. Ultrasound done for further workup
SPECIES	ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN
Canine	Urinary System
BREED	The urinary bladder is moderately distended with anechoic contents. No masses, inflammatory changes, echogenic sediment or cystoliths are observed. The urinary bladder, trigone and visible pelvic urethra are normal in thickness with a smooth mucosal surface.
Mixed	The right kidney is normal in size (6.7 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, mineral or infarcts observed.
SEX	The left kidney is normal in size (6.1 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, mineral or infarcts observed.
Spayed Female	
AGE	Adrenal Glands
9 Years 11 Months	Adrenal glands are plump/swollen in size. Normal shape and contour are maintained without evidence of capsular invasion. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal. The left adrenal gland measures 2.43 cm long x 0.76 cm thick. The right adrenal gland measures 2.79 cm long x 0.90 cm at the cranial pole and 0.78 cm at the caudal pole. A hyperechoic nodule is noted in the cranial pole of the right adrenal gland. Nodule does not disrupt normal shape and/or architecture.
WEIGHT	Spleen
39.5 Pounds	The 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.
INTERPRETED BY	Liver
Beth Johnson, DVM DACVIM	Liver is subjectively enlarged with mildly irregular margins. Parenchyma is heterogenous characterized by multiple poorly defined hypoechoic nodules within otherwise hyperechoic liver parenchyma. Visible vasculature and biliary tree appear normal without distension or congestion.
IMAGING PERFORMED BY	Gastrointestinal
Dr. Leal	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.
HOSPITAL NAME	
Blairstown AH	
REFERRING VET	
Dr. Harker	
INVOICE	
40609	
DATE	
8/18/22	



PATIENT

Coraline Hendershot

The visible colon is normal in wall thickness (< 0.2 cm) and layering. Contents are consistent with normal formed feces and gas.

SPECIES

Pancreas

Canine

The pancreatic parenchyma is appropriately isoechoic to surrounding tissue. Visible capsule is smooth and normal in contour. There is no visible pancreatic duct dilation. There is no evidence of active peripancreatic inflammation.

BREED

Free Abdomen

Mixed

There is no evidence of free peritoneal effusion noted in these images.

SEX

There is no apparent lymphadenopathy noted in these images.

Spayed Female

ULTRASONOGRAPHIC FINDINGS

AGE

- **Bilateral adrenomegaly** – consistent with adrenal hyperplasia secondary to pituitary dependent hyperadrenocorticism vs stress or normal variant. Interpret in combination with clinical signs of hyperadrenocorticism.

9 Years 11 Months

- **Hyperechoic adrenal nodule (cranial pole right adrenal gland)** – Differentials include primary adrenal cortical adenoma or adenocarcinoma, pheochromocytoma, myelolipoma, adrenal hyperplasia secondary to pituitary disease or metastatic disease. Ultrasound alone cannot differentiate between functional and non-functional nodules and/or between benign and malignant disease. Small nodules without other evidence of abdominal disease (to suggest metastatic disease) and/or clinical signs (to suggest adrenal disease) are most often incidental and should be monitored.

WEIGHT

39.5 Pounds

- **Hyperechoic hepatomegaly** - This appearance is non-specific and most consistent with a benign steroid (endocrine) or vacuolar hepatopathy or reactive or idiopathic hepatopathy. Inflammatory and/or infiltrative disease (such as round cell neoplasia) are also possible, but considered less likely.

INTERPRETED BY

Beth Johnson, DVM
DACVIM

- **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.

IMAGING PERFORMED BY

Dr. Leal

HOSPITAL NAME

Blairstown AH

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

REFERRING VET

Dr. Harker

The described adrenal gland, liver and gallbladder changes are all suggestive of hyperadrenocorticism. If clinical signs of hyperadrenocorticism, such as polyuria, polydipsia, polyphagia, panting, hair loss, hypertension, etc. are present, testing for hyperadrenocorticism with a LDDS test is warranted. If clinical signs are not present, monitoring is recommended with testing pursued when/if clinical signs develop. If not recently evaluated, blood pressure is recommended. If not recently evaluated, a urinalysis and, if indicated based on urinalysis results, urine culture are also recommended. If protein is present in an otherwise quiet sediment, protein quantification with a urine protein to creatinine ratio is recommended.

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Further evaluation of the liver could also be performed with a fine needle aspirate, as was reportedly done at the time of the ultrasound. Recommendations are to submit this sample for cytology.



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Coraline Hendershot

SPECIES

Canine

BREED

Mixed

SEX

Spayed Female

AGE

9 Years 11 Months

WEIGHT

39.5 Pounds

INTERPRETED BY

Beth Johnson, DVM
DACVIM

IMAGING PERFORMED BY

Dr. Leal

HOSPITAL NAME

Blairstown AH

REFERRING VET

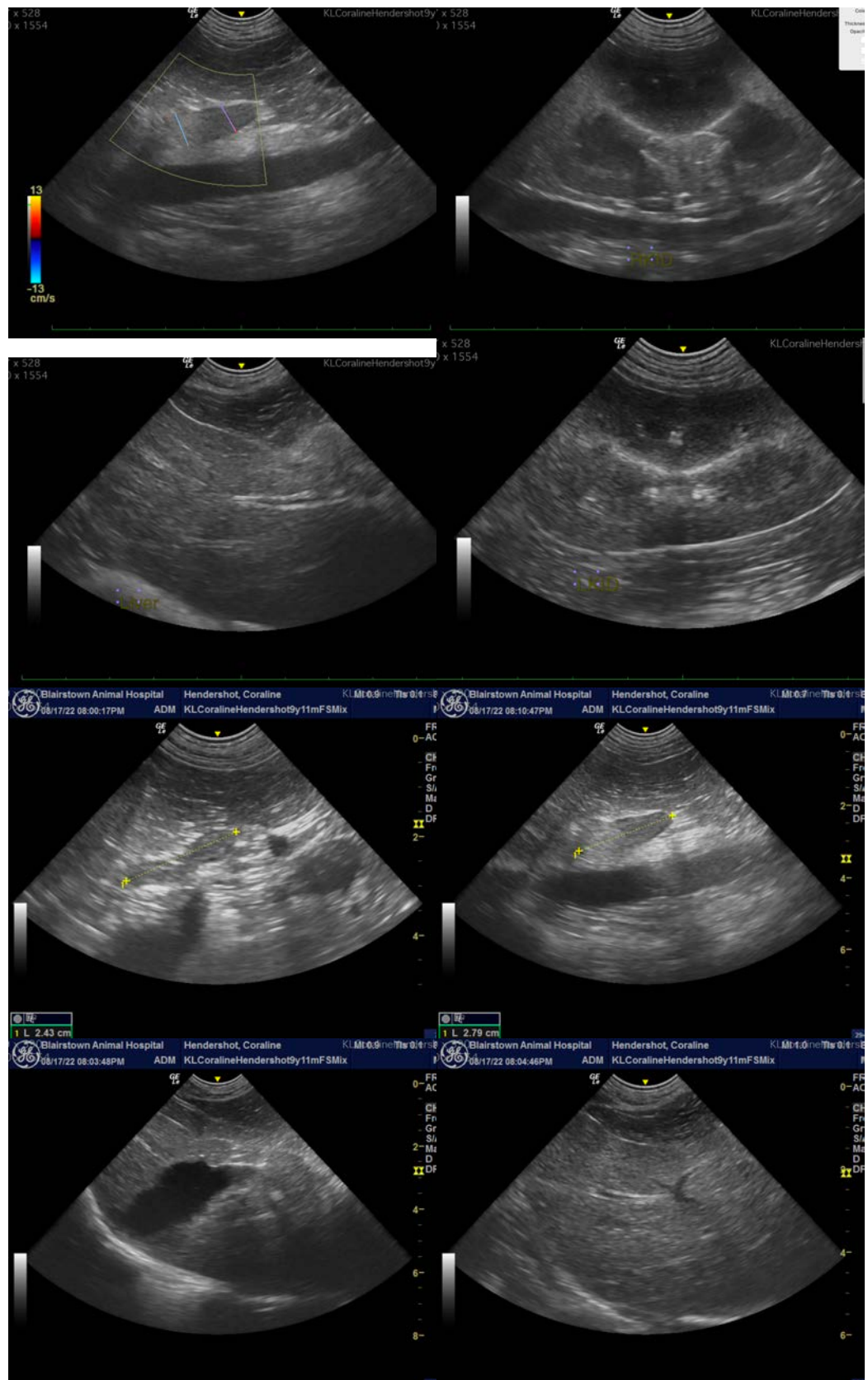
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PATIENT

Coraline Hendershot

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.

SPECIES

Canine

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.

BREED

Mixed

Beth Johnson, DVM, DACVIM

Beth.Johnson@sonopath.com

SEX

Spayed Female

AGE

9 Years 11 Months

WEIGHT

39.5 Pounds

INTERPRETED BY

Beth Johnson, DVM
DACVIM

**IMAGING
PERFORMED BY**

Dr. Leal

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