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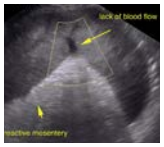
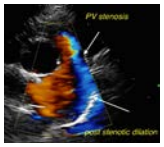
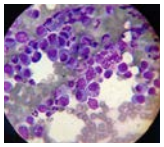
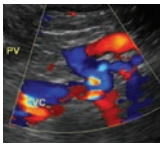

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1-800-838-4268 info@sonopath.com

PATIENT

Lilly Bernhardt

SPECIES

Canine

BREED

Mixed

SEX

Spayed Female

AGE

8 Years 4 Months

WEIGHT

20.6 Pounds

INTERPRETED BY

Beth Johnson, DVM DACVIM

IMAGING PERFORMED BY

Dr. Jessie Evoniuk

HOSPITAL NAME

State Ave Vet

REFERRING VET

Dr. Jessie Evoniuk

INVOICE

39517

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7/14/22

PRESENTING CLINICAL SIGNS

Subjective: yesterday groomer said her nipples were bloated and groomer had thought she was pregnant but spayed. Groomed yesterday. Her eye was like that prior. Was less swollen before, kept the eye half way closed. bloated in the stomach; hard abdomen. Beginning of this week. notices a couple days ago no change to her diet active? sleeps most of the time no noticeable pain right eye is full of slime and puss couple days ago notice she closed her eye but now she wont move it and looks worse Ate yesterday and drank water today she hasnt touched her food VD none CS dry coughs, hair ball or something in her throat no other concern no travel hit by car a couple months ago Free fed normally, gave left over of brats last night and ate that all. This morning she didn't want to anything. HWT gb Objective: QAR. Right eye- severe blepharospasm, corneal edema, scleral congestion with thickening and erythema of the eyelids. Difficult to fully assess due to pain. Mucoid discharge. L eye appears clear/normal Dosed Hydromorphone to facilitate remainder of exam. No uptake of Fluorescein dye in either eye. IOP Tonopen OD 80/79, OS 16/18. T 100.9 Abd very tense and distended (O noted more distended belly to the point where groomer thought she as pregnant). Quick scan- no free fluid. H/L WNL. BCS 8/9. Teeth- G4, severe hallitosis. Skin and coat appear healthy, recent grooming Chem elevated ALT, ALP, Amylase mild elevation Assessment: Severe uncontrolled glaucoma- RO secondary vs primary, cause unknown at this time Abdominal distension - open Liver value elevations- RO vacoular hepatopathy/age related changes, primary liver disease, cholangiohepatitis, secondary to endocrine disease, other Plan: Latanoprost given to OD and 77 at 1:30, repeat dosing 73 at 3:30. See notes with O. Given severe longer standing glaucoma at risk for continued poor control, pain, and blind eye. Disc typically require prompt emergency treatment when pressures are >50 to save vision. Consider enucleation vs medical management attempts. The eye is currently very painful, draining, and she is having signs of pain at home. Disc after failure of Latanoprost that given the potential enucleation would recommend abdominal US to better evaluate liver and to Ro neoplasia, other primary disease. No travel reported. No known trauma or uveitis prior to changes to the eye. JME
Abnormal PE/Chem/CBC/UA Results: See EMR

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

Urinary bladder is moderately distended. It has a normal uniform wall thickness (<0.2 cm). Contents include primarily anechoic fluid combined with both gravity dependent and suspended echogenic non-shadowing debris within the fluid. No masses or cystoliths are observed. The trigone and visible pelvic urethra are normal in thickness with a smooth mucosal surface.

The right kidney is normal in size (5.4 cm) and shape with smooth peripheral margination. A normal 1:3 cortex to medulla ratio is maintained. The medulla and cortices are uniform in texture with some mild increased echogenicity and mild loss of corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed. Small cortical cysts noted.

The left kidney is normal in size (5.2 cm) and shape with smooth peripheral margination. A normal 1:3 cortex to medulla ratio is maintained. The medulla and cortices are uniform in texture with some mild increased echogenicity and mild loss of corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed. Small cortical cysts noted.

Adrenal Glands

The right adrenal gland is not able to be well visualized in these images.

The adrenal gland is enlarged (1.9 cm at the caudal pole) with mild heterogenous parenchymal changes. Swollen capsular expansion is noted without evident capsular escape or vascular invasion.

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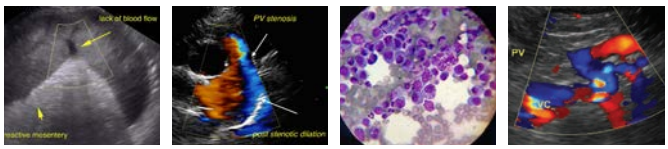

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Spleen

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). Multifocal well-demarcated hyperechoic homogenous nodules are present. Splenic vasculature appears normal.

Liver

The liver is subjectively enlarged with mildly irregular margins. Parenchyma is heterogenous characterized by multiple poorly defined hypoechoic nodules within otherwise hyperechoic liver parenchyma. A focal 1.3 cm hyperechoic nodule is noted near the gallbladder. Visible vasculature and biliary tree appear normal without distension or congestion.

The 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 stomach wall is normal in thickness (canine < 0.5 cm and feline < 0.4 cm) and layering. The lumen of the stomach is mildly distended with echogenic non-shadowing luminal contents and gas consistent with normal ingesta. There is 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 (canine duodenum < 0.5 cm and feline duodenum < 0.4 cm; other < 0.3 cm). 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 (< 0.2 cm) and layering. Contents are consistent with normal formed feces and gas.

Pancreas

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.

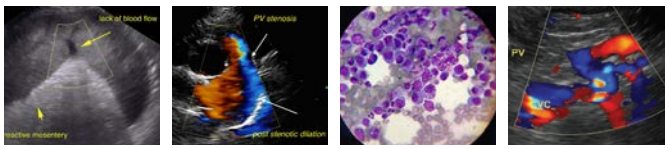
Free Abdomen

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

There is no apparent lymphadenopathy noted in these images.

PRIMARY FINDINGS

- Left adrenal mass - consistent with adenoma or possibly hyperplasia. Early pheochromocytoma cannot be ruled out. Interpret in combination with clinical signs of hyperadrenocorticism or other adrenal disease.
- Heterogenous Liver – These changes are most consistent with benign processes such as nodular hyperplasia, steroid (vacuolar) hepatopathy, extramedullary hematopoiesis or possibly chronic inflammatory disease and less commonly infiltrative round cell or metastatic neoplasia.



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- 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.

SECONDARY FINDINGS

- Hyperechoic splenic nodules – most consistent with benign myelolipomas. Other differentials such as fibrosis or calcification caused by old hematomas or infarcts, chronic inflammation, granulomatous disease or metastatic disease cannot be ruled out, but are less likely.
- Urinary bladder debris
- Age related kidney changes

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

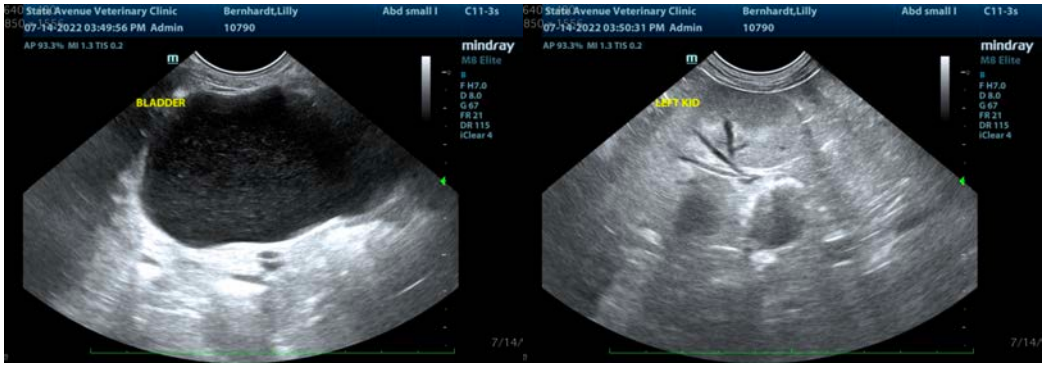
The described adrenal gland, liver and gallbladder changes are all suggestive of hyperadrenocorticism. If clinical signs of hyperadrenocorticism, such as polyuria, polydipsia, polyphagia, panting, hair loss, hypertension, etc. are present, testing for hyperadrenocorticism with a LDDS test is warranted. If a LDDS test has been evaluated with a normal result, investigation of possible atypical hyperadrenocorticism with a full ACTH stimulation adrenal panel to the University of Tennessee could be considered.

If clinicals 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.

Based on these images, adrenal dependent hyperadrenocorticism appears more likely. However, it can't be definitively diagnosed given the inability to evaluate the right adrenal gland. If low-dose Dexamethasone suppression test confirms adrenal dependent hyperadrenocorticism, treatment recommendations include a left adrenalectomy.



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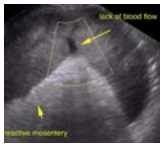
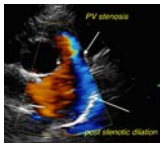
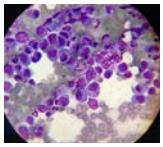
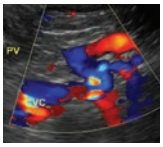

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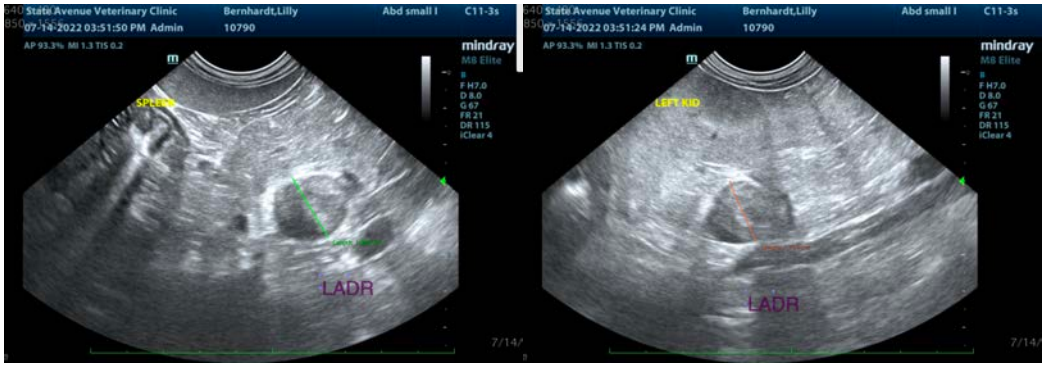

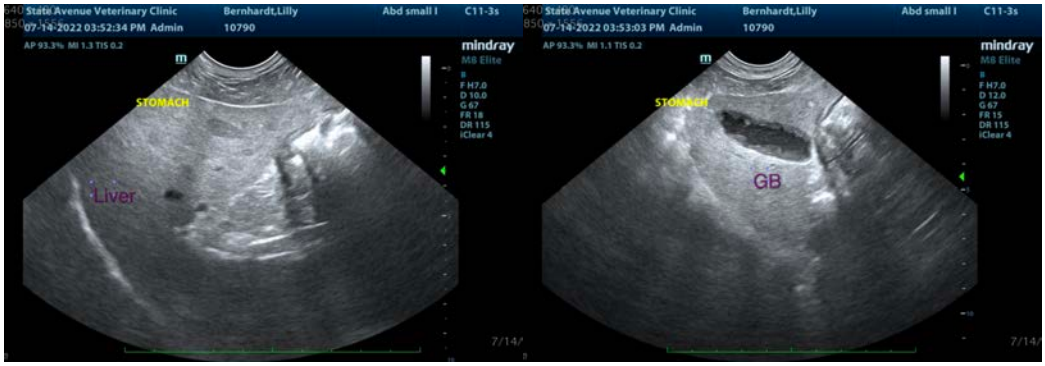

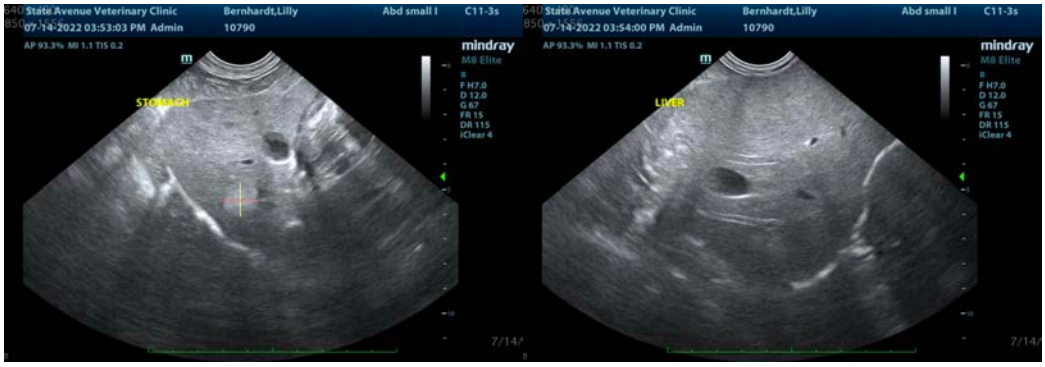

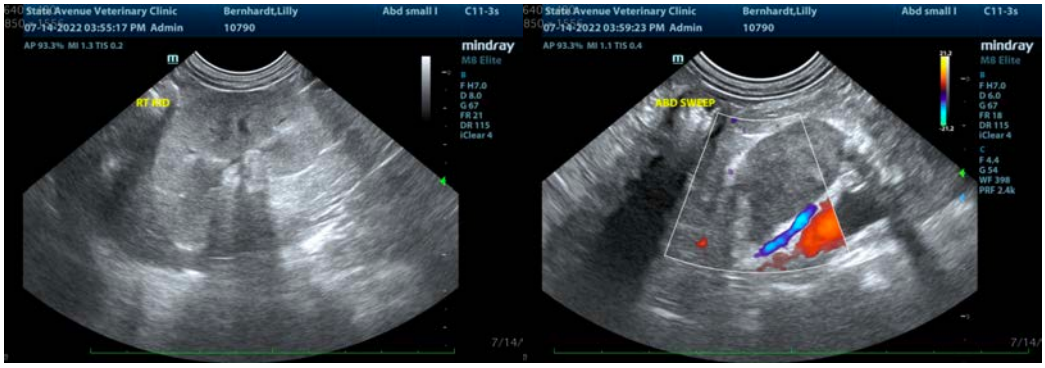

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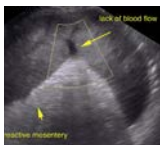
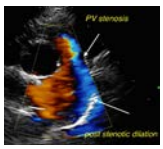
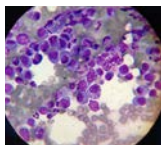
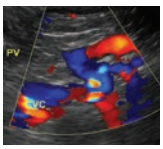

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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

Beth Johnson, DVM, DACVIM
Beth.Johnson@sonopath.com