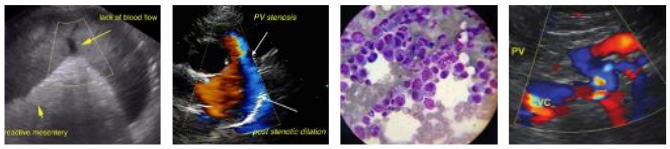
SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™



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

PATIENT
Leia Harper

SPECIES
Canine

BREED
English Shepherd Mix

SEX
Spayed Female

AGE
14 Years

WEIGHT
45.5 Pounds

INTERPRETED BY
Beth Johnson, DVM DACVIM

IMAGING PERFORMED BY
Amy Mayhew, LVT

HOSPITAL NAME
SVS Imaging MI

REFERRING VET
Kimball AH

INVOICE
20342

DATE
1/2/23

PRESENTING CLINICAL SIGNS

History: Owner took pet to ER on Saturday as an emergency for vomiting and not eating. They are recommending an ultrasound to rule out a mass.

Abnormal PE/Chem/CBC/UA Results: Enlarged Liver and elevated liver values

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

Urinary bladder is adequately 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.

Left kidney is normal is size (5.6 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.

Right kidney is normal is size (5.94 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. A cortical cyst is noted in the right kidney.

Adrenal Glands

Left adrenal gland is normal in size (0.44 cm at cranial pole and 0.41 cm at caudal pole), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

The right adrenal gland is 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 right adrenal gland measures 1.52 cm at cranial pole and 0.87 cm at caudal pole.

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). No focal nodules or masses are observed. Splenic vasculature appears normal.

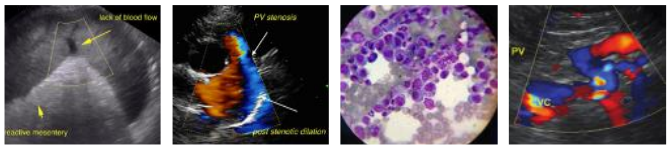
Liver

Liver is subjectively normal in size with normal smooth curvilinear peripheral contour. Parenchyma is appropriately hypoechoic to the spleen in echogenicity and appropriately mildly coarse and homogenous in echotexture. No focal lesions are observed. Visible vasculature and biliary tree appear normal without distension or congestion.

Gallbladder is mildly overdistended with a moderate amount of non-dependent, mildly aggregated/inspissated sludge. Hypo to anechoic cystic areas are noted between the gallbladder sludge and luminal wall. The wall is otherwise smooth without visible thickening. There is no evidence of cystic or CBD dilation. There is no evidence of effusion.

Gastrointestinal

The visible stomach wall is normal in thickness and layering. The lumen of the stomach is mildly distended with very echogenic reverberation artifact from intraluminal gas. There is no evidence of



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obstruction, foreign material or infiltrative disease; however, complete visualization of far wall is partially inhibited by gas. Pyloric outflow tract appears patent.

The visible small intestines are normal in wall thickness and layering. 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 and layering. Contents are consistent with normal formed feces and gas.

Pancreas

The observed pancreas appears appropriately isoechoic to surrounding omental fat. Visible capsule is smooth and normal in contour. Visible pancreatic parenchyma is homogenous and unremarkable. There is no visible pancreatic duct dilation. There is no evidence of active peripancreatic inflammation.

Free Abdomen

There is no evidence of peritoneal effusion. There is no apparent lymphadenopathy.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- Emerging mucocele – 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. The non-dependent nature of this sludge combined with the cystic areas are suggestive, however, of possible emerging cystic mucosal hyperplasia or early gallbladder mucocele.

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

Secondary Findings

- Small cortical cyst in the right kidney

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

This patients decreased appetite, vomiting and increased liver enzymes are suspected to be secondary to an emerging gallbladder mucocele. If supportive/symptomatic medical management has resulted in improvement of clinical signs, continued medical management, including hepatic nutraceuticals, ursodiol, broad spectrum antibiotics, etc., could be continued with close monitoring of patient laboratory work and ultrasound for progression, knowing that medical management does not always result in improvement and can't prevent a mucocele progression/rupture, or if patient is still clinically ill, has cranial abdominal pain, and/or laboratory values don't improve, an exploratory laparotomy with planned cholecystectomy and liver biopsy may be necessary sooner.

Incidentally, the adrenomegaly in this patient may suggest concurrent hyperadrenocorticism, that potentially helped contribute to the emerging mucocele, however, further evaluation of hyperadrenocorticism is not recommended in the face of clinical illness due to false positives, therefore, if clinical signs of hyperadrenocorticism are present, testing could be considered in the form of a LDDST in the future, once clinical illness has resolved.

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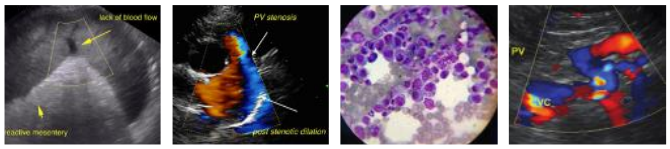

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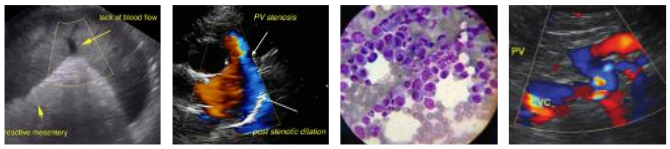

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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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