

**PATIENT**

Jager McCue

SPECIES

Canine

BREED

German Shepherd

SEX

Spayed Female

AGE

2 Years

WEIGHT

83 Pounds

INTERPRETED BYBeth Johnson, DVM
DACVIM**IMAGING PERFORMED BY**

Amy Mayhew, LVT

HOSPITAL NAME

SVS Imaging MI

REFERRING VET

Briarwood VH

INVOICE

41245

DATE

9/12/22

PRESENTING CLINICAL SIGNS

Intermittent episodes of not eating that resolve with supportive care.
 Abnormal PE/Chem/CBC/UA Results: Please see attached. Appears painful in abdomen when palpated.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**Urinary System**

The urinary bladder appears subjectively moderately overdistended 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.

Kidneys are normal in size and contour. A relatively uniform hyperechogenicity is observed with mildly decreased corticomedullary distinction. There is no pyelectasia noted and no mineral is observed. No overt masses/nodules are observed. The left kidney measures 7.14 cm. The right kidney measured 7.52 cm.

Adrenal Glands

Adrenal glands are small (flattened contour). Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal. The left adrenal gland measured 0.35 cm at the cranial pole and 0.42 cm at the caudal pole. The right adrenal gland measured 0.42 cm thick.

Spleen

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.

Liver

The 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.

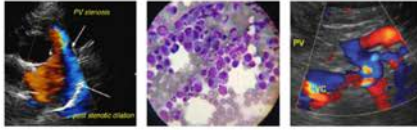
Gallbladder is mildly overdistended with a moderate amount of non-dependent, mildly aggregated/inspissated sludge. Hypo to anechoic cystic areas are noted between the gallbladder sludge and luminal wall. The wall is otherwise smooth without visible thickening. There is no evidence of cystic or CBD dilation.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

Gastrointestinal

The stomach wall is normal in thickness (canine < 0.5 cm and feline < 0.4 cm) and layering. The lumen of the stomach is empty with 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. Small intestinal motility appears adequate (1-3 contractions per min). The lumen of the small intestine 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.

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

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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.

ULTRASONOGRAPHIC 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.
- **Flat adrenal glands** – This can be a normal patient variant and/or a sign of exogenous cortisol administration. If exogenous steroids are not being administered, hypoadrenocorticism (either relative or absolute) should be considered.
- **Nephritis** – This appearance can be consistent with chronic interstitial nephritis or glomerulonephritis. Toxic insult and/or infectious disease (pyelonephritis, Leptospirosis, etc.) cannot be ruled out. This finding should be interpreted in combination with suspicion for renal disease and/or supporting laboratory or urinalysis changes.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Given this patient's vague inappetence combined with the reported laboratory change and ultrasound findings reported above, a variety of differentials exist for the inappetence, and recommendations are to begin ruling out diagnoses once at a time in a stepwise fashion.

A small percentage of patients with a normal baseline cortisol can still have hypoadrenocorticism. Therefore, if not already evaluated, a full ACTH stimulation test is recommended to rule out hypoadrenocorticism.

Given the patient breed, a gastrointestinal panel could be considered to look for evidence of possible exocrine pancreatic insufficiency versus other malabsorption problems resulting in this patient's inappetence.

Given the azotemia and mild kidney changes, testing for Leptospirosis is indicated, as is a blood pressure if not recently evaluated.

Given the variety of other changes, the low T4 is suspected to most likely be sick euthyroid. However, to rule out hypothyroidism as a cause of the decreased appetite, a TSH or full thyroid assessment panel to Michigan State could be considered.

In the meantime, empirical therapeutic recommendations include deworming with a 5-day course of Panacur, as well as transition to a hydrolyzed diet on a trial-and-error basis, followed by other categories of diets on a trial-and-error basis if a hydrolyzed diet does not result in improvement.

If one of the above metabolic, infectious, hormone abnormalities, etc. diagnoses are not obtained, given this patient's reported abdominal discomfort, the decreased appetite could be from the emerging mucocele, and while slightly atypical in a dog of this young age, a cholecystectomy could be considered if another cause for the decreased appetite cannot be found.

IMAGING PERFORMED BY

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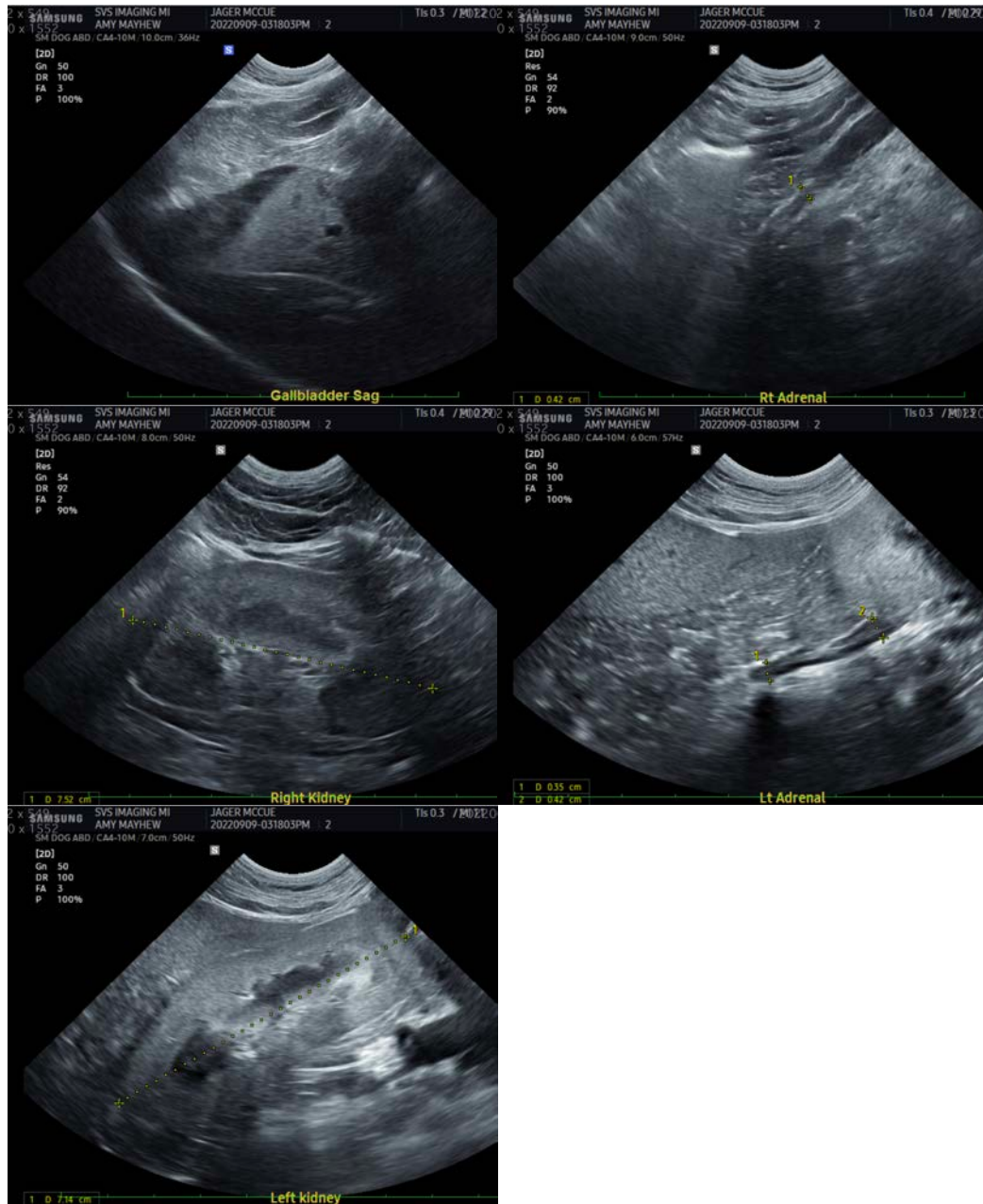
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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