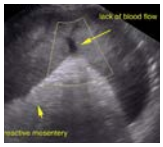
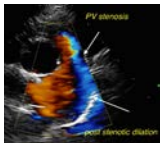
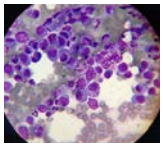
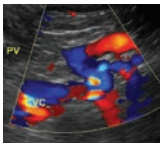
SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™

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

PATIENT
Flash Gordon

SPECIES
Canine

BREED
Yorkshire Terrier

SEX
Neutered Male

AGE
12 Years

WEIGHT
17 Pounds

INTERPRETED BY
Beth Johnson, DVM DACVIM

IMAGING PERFORMED BY
Dr. Anthony Smatt

HOSPITAL NAME
The Pets I Love

REFERRING VET
Dr. Anthony Smatt

INVOICE
40477

DATE
8/16/22

PRESENTING CLINICAL SIGNS

Patient had kennel cough and went on course of doxycycline for 2 weeks, after the 2 weeks patient was lethargic and decreased appetite. On recheck patient has fever and lethargy, decreased appetite. performed blood work - results below - hospitalized patient for iv fluids and supportive care Abnormal PE/Chem/CBC/UA Results: High WBC's, Neutrophils, ALP, and low Bun. The rest of the liver values and GGT, Bili wnl.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

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.

The area of the prostate is examined without evident pathology.

Kidneys are overall normal in size 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 cortical echogenicity and mild loss of corticomedullary distinction, expected in this age patient. There is no evidence of pyelectasia, mineral or infarcts observed. The left kidney measures 4.3 cm. The right kidney measures 4.8 cm.

Adrenal Glands

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 is 0.50 cm at the cranial pole and 0.65 cm at the caudal pole. The right adrenal gland is 0.73 cm at the cranial pole and 0.76 cm at the caudal pole.

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

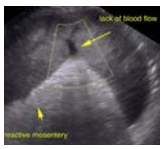
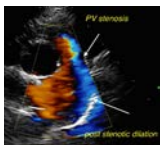
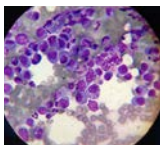
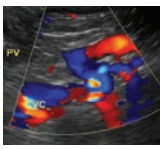
The liver is subjectively normal in size with normal smooth curvilinear peripheral contour. Parenchyma is appropriately hypoechoic to the spleen in echogenicity and appropriately mildly coarse and homogenous in echotexture. No focal lesions are observed. Visible vasculature and biliary tree appear normal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

The gallbladder is non-distended in size. The wall is smooth without visible thickening. Luminal contents are primarily anechoic. There is no evidence of cystic or common bile duct dilation.

Gastrointestinal

The visible stomach wall is normal in thickness 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

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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

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

SECONDARY FINDINGS

- Age related kidney changes

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

There are no ultrasonographically visible causes to explain this patient's clinical decline, fever, etc. after receiving Doxycycline for kennel cough. Other differentials include possible progression of kennel cough into pneumonia. Therefore, 3-view thoracic radiographs are recommended if not already evaluated. Given the reportedly low BUN, if the patient is not polyuric or polydipsic to explain a low BUN from dilution, and/or the bloodwork wasn't drawn after fluid therapy, etc., then given patient breed, both decreased liver function and gastrointestinal disease could be explanations for the low BUN, and therefore recommendations include:

- Bile acids
- A gastrointestinal malabsorption panel (including cobalamin, folate, TLI and PLI) to Texas A&M GI Laboratory is recommended for further evaluation of GI and pancreatic function.

Both decreased liver function as well as gastrointestinal disease, however, are considered unlikely if this patient has never experienced clinical signs and/or laboratory changes prior to this to suggest one of those problem.

In the meantime, supportive/symptomatic empirical therapy in the form of broad-spectrum antibiotics, (given the fever), symptomatic care of the gastrointestinal signs with antiemetics, gastroprotectants, +/- appetite stimulants if necessary, and fluid support, etc is recommended.

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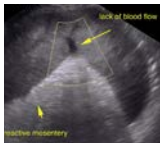
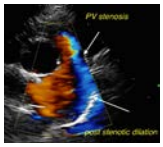
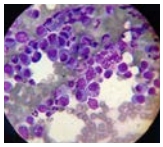
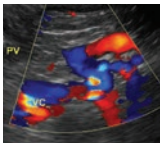

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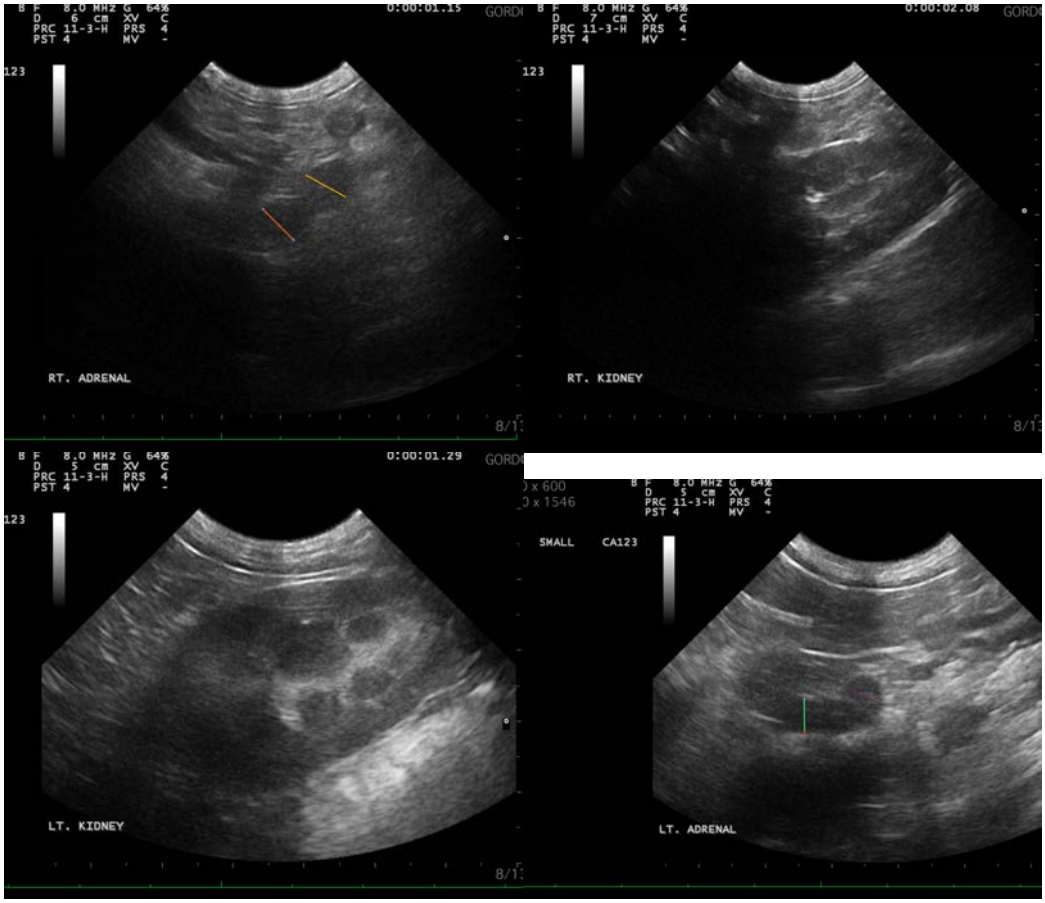

The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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