



PATIENT

CoCo Adams

SPECIES

Feline

BREED

DLH

SEX

Spayed Female

AGE

17 Years

WEIGHT

5.22 kg

INTERPRETED BY

Beth Johnson, DVM
DACVIM

IMAGING PERFORMED BY

Dr. Van Nieuwal

HOSPITAL NAME

Animal Emergency
Hospital Volusia

REFERRING VET

Dr. Van Nieuwal

INVOICE

43918

DATE

1/5/23

PRESENTING CLINICAL SIGNS

Owner states patient was vomiting, anorexic, lethargic, and increased RR while sleeping about one week ago so went to rDVM. Had BW and rads done - owner did not have results with her but said everything was normal as far as she knows. Tonight owner brought patient in for not eating the past 3-4 days, still lethargic, and continued vomiting. Owner changed diet from Prescription metabolic diet to Purina sensitive stomach and Friskies, unsure if transition done. History of radioactive iodine for thyroid done about three years ago. Owner thinks patient had a stroke December of 2021 as well where she could not stand on left hind leg.

Abnormal PE/Chem/CBC/UA Results: ProBNP: normal/negative PCV/TS: 14%/6.6 g/dL clear serum CBC: RBC 2.70, HGB 4.8, HCT 14.2%, PLT 38 EPOC: pO2 154.0, cSO2 99.2, pCO2 19.5, bicarb 9.3, TCO2 9.2, BE ECF -17.3, ionized calcium 1.09, anion gap 32, lactate 10.64, BUN 35, creat 3.19, glucose 171 mg/dL CHEM: BUN 43.2, creat 2.0, phos 7.8, TP 5.6, glucose 166 mg/dL, ALT 108 Radiograph report states no obvious reason seen for symptoms noted in patient

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 right kidney is normal in size (3.5 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.

The left kidney is normal in size (3.6 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.

Adrenal Glands

The right adrenal gland is normal in size (0.44 cm), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

The area of the left adrenal gland is examined without evident pathology.

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 moderately distended with anechoic bile as well as mild 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.



PATIENT

Gastrointestinal

CoCo Adams

The stomach wall is normal in thickness (canine < 0.5 cm and feline < 0.4 cm) and layering. The lumen of the stomach is moderately distended with fluid as well as echogenic, non-shadowing luminal contents and a large amount of gas. There is no evidence of obstruction, foreign material or infiltrative disease. However, complete visualization is partially inhibited by gas.

SPECIES

Feline

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 mildly distended with fluid and echogenic non-shadowing luminal contents and gas, also partially limiting complete examination in these images.

BREED

DLH

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

SEX

Spayed Female

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.

AGE

17 Years

Free Abdomen

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

WEIGHT

5.22 kg

There is no apparent lymphadenopathy noted in these images.

ULTRASONOGRAPHIC FINDINGS

INTERPRETED BY

Beth Johnson, DVM
DACVIM

- **Mildly fluid distended stomach** – This is likely caused by delayed gastric emptying caused by ileus secondary to an underlying metabolic disease, but a partial obstruction due to foreign material not obviously visible in these images can't be definitively ruled out.
- **Mild gallbladder debris** - Cholecystic debris is of unknown clinical significance. It can be seen with biliary stasis from fasting or illness, however, it can also be associated with hepatobiliary disease in cats 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. Van Nieuwal

HOSPITAL NAME

Animal Emergency
Hospital Volusia

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

This patient's clinical signs are most likely secondary to an underlying metabolic disease resulting in nausea, especially given the concurrent anemia. Primary gastrointestinal disease, even a partial obstruction, cannot be definitively ruled out, but there is no visible evidence of that in these images.

REFERRING VET

Dr. Van Nieuwal

Recommendations include workup of the anemia, beginning with determining whether or not it is regenerative, and then proceeding based on regeneration results. Differentials include an early hemorrhage or hemolysis, potentially chronic kidney disease, bone marrow disease, infectious disease, or anemia of other chronic disease versus other. A transfusion may be necessary.

INVOICE

43918

In the meantime, supportive/symptomatic medical management of the gastrointestinal signs with antiemetics, gastroprotectants, appetite stimulant, or even a feeding tube placement, if necessary, fluid therapy, etc. is recommended. If gastrointestinal signs persist, recheck imaging (ideally fasted if possible) with additional zoomed in images of the small bowel is recommended.

DATE

1/5/23



PATIENT

CoCo Adams

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.

SPECIES

Feline

BREED

DLH

SEX

Spayed Female

AGE

17 Years

WEIGHT

5.22 kg

INTERPRETED BY

Beth Johnson, DVM
DACVIM

IMAGING PERFORMED BY

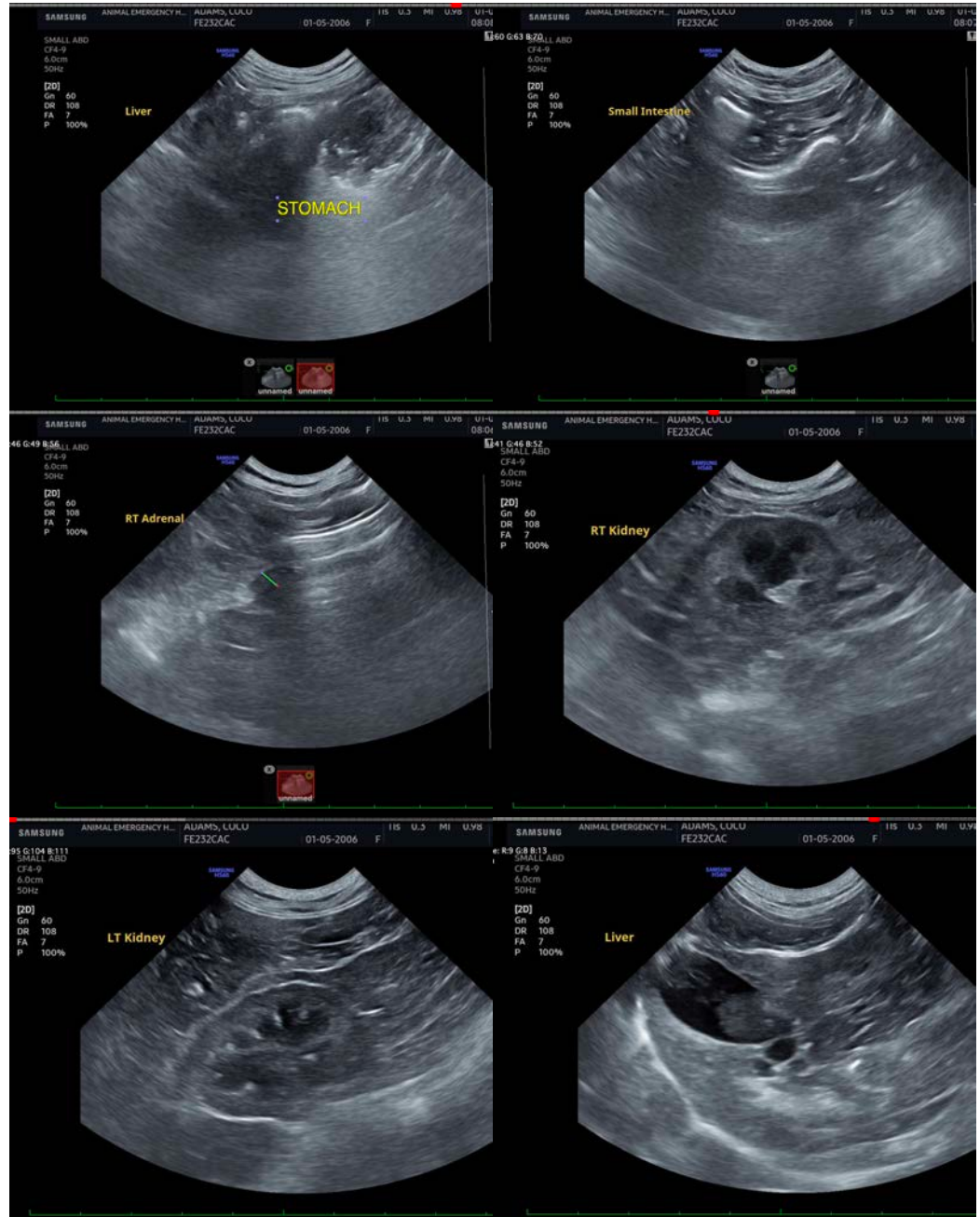
Dr. Van Nieuwal

HOSPITAL NAME

Animal Emergency Hospital Volusia

REFERRING VET

Dr. Van Nieuwal



INVOICE

43918

DATE

1/5/23

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