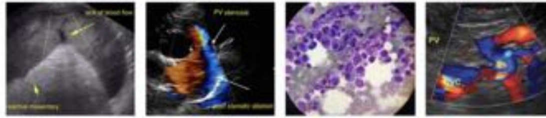
SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
1-800-838-4268 info@sonopath.com SonoPath.com



Charleston Mobile Veterinary Services
IMAGING PERFORMED BY
CharlestonMobile.Net 800.403.5408

PATIENT

Walter Sanada

SPECIES

Canine

BREED

Bulldog Mix

SEX

Neutered Male

AGE

6 years

WEIGHT

43 lbs

INTERPRETED BY

Andrea Nicastro, DVM, Diplomate ACVIM (*Small Animal Internal Medicine*)

IMAGING PERFORMED BY

Andrea Nicastro, DVM, Diplomate ACVIM (*Small Animal Internal Medicine*)

HOSPITAL NAME

Flowertown AH

REFERRING VET

Dr. Guffey

INVOICE

11793

DATE

10.10.22

PRESENTING CLINICAL SIGNS

History: Vomiting and diarrhea for about a week. Slow to eat his food. Prior history of a foreign body.

Radiographs show free fluid in the abdomen.
Bloodwork shows panhypoproteinemia with an albumen of 1.3. Globulin 1.7.
Unremarkable CBC. Normal liver and kidney values. Low cholesterol.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The **urinary bladder** wall is normal in thickness and the mucosal surface is smooth. The bladder lumen is moderately distended with mostly anechoic urine. No masses, inflammatory changes or calculi are observed. Ureteral papillae and visualized portion of the proximal urethra, visible to a depth of 2 cm, are normal.

The prostate is normal in size (1.03 cm in width) and shape. Parenchyma is homogenous. The prostatic urethra appears normal without evidence of dilation or obstruction

The **left kidney** is normal size (4.95 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with normal corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The **right kidney** is normal size (6.45 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with normal corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

Adrenal Glands

The **left adrenal gland** is normal size (0.73 cm at cranial pole) (0.71 cm at caudal pole) (2.76 cm in length); normal shape; homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

The **right adrenal gland** is normal size (0.94 cm at cranial pole) (0.88 cm at caudal pole); normal shape; homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

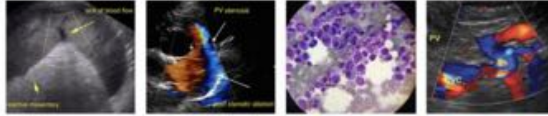
Spleen

The **spleen** is normal in size (1.57 cm in width at the level of the hilus) with a normal capsular contour. There is appropriate echogenicity and echotexture. No focal lesions are observed. Splenic vasculature is normal.

Liver

The **liver** is subjectively normal in size with normal contours and structure. There is appropriate echogenicity and echotexture. No overt structural evidence of inflammatory, infiltrative, or regenerative pathology is evident. Vascular and biliary tracts are of normal volume with no evidence of congestion. No pathological hepatic lymphadenopathy observed. The portal vein to caudal vena cava ratio is approximately 1: 1.

The **gall bladder** lumen is moderately distended. The wall is thin and smooth. Luminal contents are anechoic. The cystic and common bile ducts are normal/not seen.



PATIENT

Walter Sanada

SPECIES

Canine

BREED

Bulldog Mix

SEX

Neutered Male

AGE

6 years

WEIGHT

43 lbs

INTERPRETED BY

Andrea Nicastro, DVM, Diplomate ACVIM (*Small Animal Internal Medicine*)

IMAGING PERFORMED BY

Andrea Nicastro, DVM, Diplomate ACVIM (*Small Animal Internal Medicine*)

HOSPITAL NAME

Flowertown AH

REFERRING VET

Dr. Guffey

INVOICE

11793

DATE

10.10.22

Gastrointestinal

The **gastric lumen** is not distended. The gastric wall and pylorus are normal in thickness with a normal layering pattern. The pyloric outflow tract is patent. The small intestinal lumen is not dilated. The small intestinal wall is diffusely thickened (up to 0.60 cm) with retention of the normal layering pattern. There is evidence of mucosal fogging and striations in several segments. Discreet masses are not identified. The colonic wall is normal. The colonic lumen contains shadowing fecal material. There is no obvious evidence of an obstructive pattern.

Pancreas

The right limb is prominent in size with slightly irregular peripheral contours. The parenchyma is largely isoechoic relative to surrounding omental fat and irregular/mottled in appearance. The pancreatic duct is not overtly dilated.

Free Abdomen

The mesentery throughout the abdomen is hyperechoic. A small to moderate amount of anechoic free fluid is present. The abdominal **lymph nodes** are normal/not visible.

Other

A **brief echocardiogram** reveals no evidence of pericardial effusion or obvious right atrial/auricular mass.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- The clinical history in conjunction with the patient's sonographic changes is consistent with a protein-losing enteropathy. Top differentials include lymphangiectasia, inflammatory bowel disease, infectious/parasitic disease, or emerging neoplasia (i.e., lymphoma).

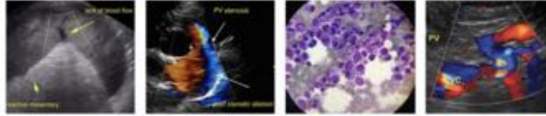
- The pancreatic changes are suggestive of mild pancreatitis, which may be acute or chronic in nature.

- The ascites/peritonitis is likely secondary to bowel pathology.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Consider the following diagnostic/treatment recommendations:

1. A fecal evaluation for ova and Giardia is recommended.
2. Prophylactic deworming with Fenbendazole is also recommended.
3. Consider a malabsorption panel including serum cobalamin and folate, TLI and PLI (send to Texas A&M).
4. A resting cortisol level to screen for hypoadrenocorticism is recommended.
5. GI biopsies (i.e., endoscopic or surgical), depending on the results of the above diagnostics, is recommended.
6. Consider supplementation with a probiotic with a high colony count (i.e., Proviable Forte or Visbiome).
7. Consider empirical treatment for small intestinal bacterial overgrowth with a 4-week course of Tylosin.
8. Continue the limited antigen diet that the patient is currently on until the results of the above diagnostics are obtained. Diet change may be warranted in the future, depending on the underlying diagnosis.



PATIENT
Walter Sanada

SPECIES
Canine

BREED
Bulldog Mix

SEX
Neutered Male

AGE
6 years

WEIGHT
43 lbs

INTERPRETED BY
Andrea Nicastro, DVM, Diplomate ACVIM (*Small Animal Internal Medicine*)

IMAGING PERFORMED BY
Andrea Nicastro, DVM, Diplomate ACVIM (*Small Animal Internal Medicine*)

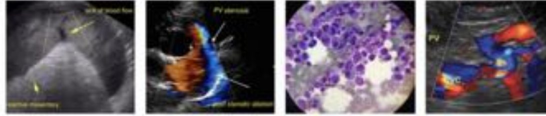
HOSPITAL NAME
Flowertown AH

REFERRING VET
Dr. Guffey

INVOICE
11793

DATE
10.10.22

9. Supplementation with fiber (i.e., Metamucil or Konsyl) may be beneficial in reducing the diarrhea.
10. Antiemetics and gastric protectants should also be given as needed.



PATIENT

Walter Sanada

SPECIES

Canine

BREED

Bulldog Mix

SEX

Neutered Male

AGE

6 years

WEIGHT

43 lbs

INTERPRETED BY

Andrea Nicastro, DVM, Diplomate ACVIM (*Small Animal Internal Medicine*)

IMAGING PERFORMED BY

Andrea Nicastro, DVM, Diplomate ACVIM (*Small Animal Internal Medicine*)

HOSPITAL NAME

Flowertown AH

REFERRING VET

Dr. Guffey

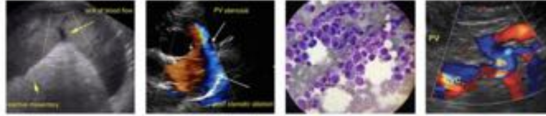
INVOICE

11793

DATE

10.10.22

SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
1-800-838-4268 info@sonopath.com SonoPath.com



Charleston Mobile Veterinary Services
IMAGING PERFORMED BY
CharlestonMobile.Net 800.403.5408

PATIENT

Walter Sanada

SPECIES

Canine

BREED

Bulldog Mix

SEX

Neutered Male

AGE

6 years

WEIGHT

43 lbs

INTERPRETED BY

Andrea Nicastro, DVM, Diplomate ACVIM (*Small Animal Internal Medicine*)

IMAGING PERFORMED BY

Andrea Nicastro, DVM, Diplomate ACVIM (*Small Animal Internal Medicine*)

HOSPITAL NAME

Flowertown AH

REFERRING VET

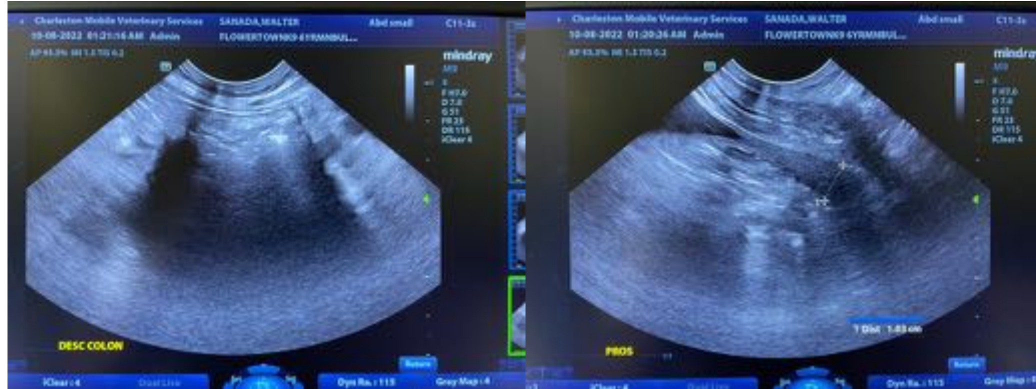
Dr. Guffey

INVOICE

11793

DATE

10.10.22



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.

Andrea Nicastro, MPH, DVM, Diplomate DACVIM (Small Animal Internal Medicine)
info@SonoPath.com