

PATIENT

Daisy Fisher

SPECIES

Canine

BREED

Mixed

SEX

Spayed Female

AGE

4/15/2008

WEIGHT

49.5 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.Kline

INVOICE

11994

DATE

11.10.22

PRESENTING CLINICAL SIGNS

Clinical Exam Findings: Large bowel diarrhea x 5 days
Rising liver values and recent bloody diarrhea.

Abnormal lab-work values: MONOS 13, ALKP 306, ALT 322, Ca 11.6, TRIG 660, PSL LIPA 303.
Unremarkable CBC. T4 normal. Fecal negative. Heartworm negative.

Current Medications: Metronidazole and Forti Flora

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder, trigone, and pelvic urethra are normal in thickness and the mucosal surface is smooth. The bladder lumen is moderately distended with anechoic urine. No masses, inflammatory changes or calculi are observed. Ureteral papillae and visualized portion of the proximal urethra, visible to a depth of 2-3 cm, are normal.

The left kidney is normal size (5.49 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal to mild loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydronephrosis. Renal vasculature is normal.

The right kidney is normal size (6.28 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal to mild loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydronephrosis. Renal vasculature is normal.

Adrenal Glands

The left adrenal gland is normal size (0.52 cm at cranial pole) (0.65 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.

The right adrenal gland is mildly enlarged (0.95 cm at cranial pole) (0.91 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.

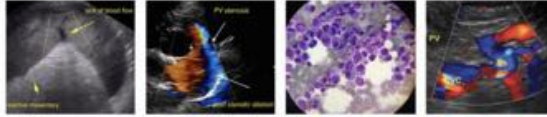
Spleen

The spleen is normal in size (1.27 cm in width at the level of the hilus) with a normal capsular contour. There is appropriate echogenicity and echotexture. A 0.72 cm ill-defined hyperechoic nodule/area is observed at the caudomedial aspect. Splenic vasculature is normal.

Liver

The liver is subjectively normal in size with normal curvilinear peripheral contours. The parenchyma is isoechoic relative to the spleen and subtly heterogenous in appearance. No distinct focal lesions are observed. Hepatic vasculature and intrahepatic biliary tracts are of normal volume with no evidence of congestion. 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. A small to moderate amount of gravity dependent, echogenic debris is observed within the lumen. The cystic and common bile ducts are normal/not seen.



PATIENT

Daisy Fisher

SPECIES

Canine

BREED

Mixed

SEX

Spayed Female

AGE

4/15/2008

WEIGHT

49.5 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.Kline

INVOICE

11994

DATE

11.10.22

Gastrointestinal

The stomach and intestine are free of stasis and exhibit normal peristaltic activity. The gastric lumen is mildly distended with gas and ingesta. 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 thickness is normal with a normal layering pattern and appropriate mural detail. Discreet masses are not identified. The colonic wall is normal. The lumen of the descending colon contains granular/soft-appearing fecal material. There is no evidence of an obstructive pattern.

Pancreas

The right limb of the pancreas is visible with normal curvilinear peripheral contours. The parenchyma is largely isoechoic relative to surrounding omental fat and slightly mottled in appearance. The pancreatic duct is visible but not overtly dilated. There is no evidence of peripancreatic inflammation or effusion.

Free Abdomen

The peritoneal cavity is normal. There is no evidence of inflammation or effusion. 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

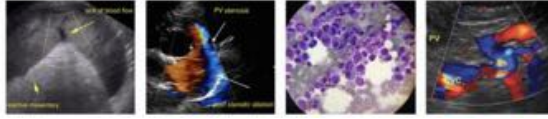
- The hepatic parenchymal changes, in conjunction with the clinical history, is concerning for a chronic diffuse hepatopathy. Top differentials include inflammatory disease (i.e., chronic hepatopathy, bacterial cholangiohepatitis), hepatotoxicosis (i.e., copper), fibrosis, other hepatopathy, +/- concurrent benign age-related change (i.e., regenerative nodular hyperplasia and/or vacuolar hepatopathy). The previously observed hypoechoic nodule is not visualized on today's scan.

Secondary Findings

- Gall bladder debris – incidental
- Mild right adrenomegaly. This may be a normal variant for this patient or may represent early hyperplastic change.
- Minor bilateral age-related renal changes
- Age-related pancreatic remodeling

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Consider pre-and postprandial serum bile acids to assess hepatic function. In order to get a definitive diagnosis, however, laparoscopic or surgical liver biopsy is recommended. If pursued, aerobic and anaerobic bile cultures should be obtained along with additional hepatic tissue samples for potential copper quantitation. Clotting times (PT/PTT) and thoracic radiographs should be performed prior to tissue sampling. If biopsies are not pursued, consider empirical treatment with hepatic antioxidants (i.e., Denamarin, Vitamin E, Ursodiol) with serial monitoring (i.e., every 3 months) of the patient's liver values to assess for progression.



PATIENT

Daisy Fisher

Regarding the mild hypercalcemia, consider an ionized calcium +/- PTH/PTHrP. A rectal examination is recommended to assess for evidence of anal sac tumors. Three-view thoracic radiographs can also be considered to assess for occult neoplasia in the chest, particularly if the ionized calcium is elevated.

SPECIES

Canine

Regarding the diarrhea, consider prophylactic deworming with Fenbendazole (despite the negative fecal evaluation). Supportive care for acute hemorrhagic gastroenteritis is recommended.

BREED

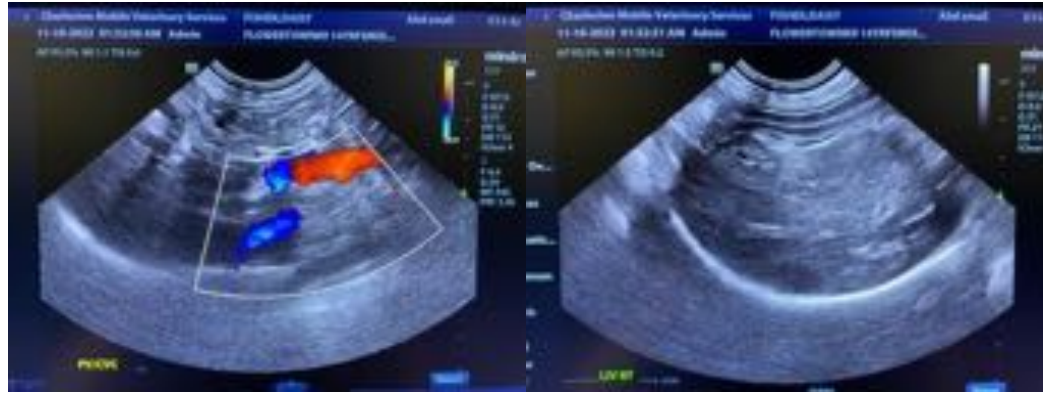
Mixed

SEX

Spayed Female

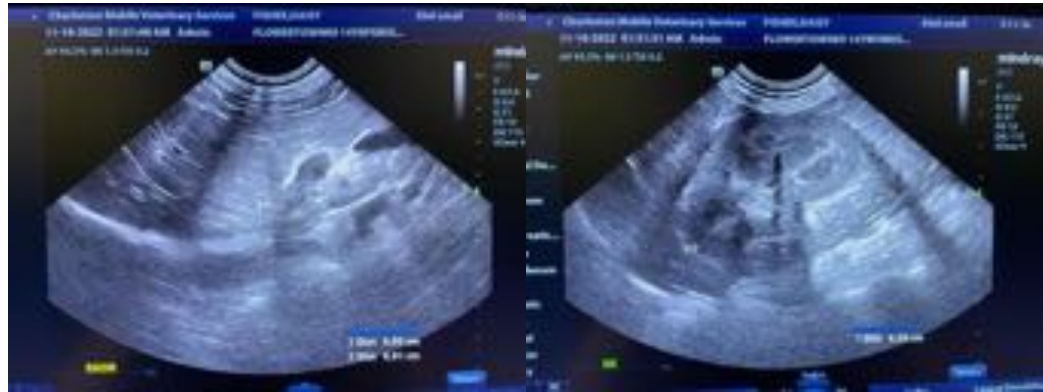
AGE

4/15/2008



WEIGHT

49.5 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

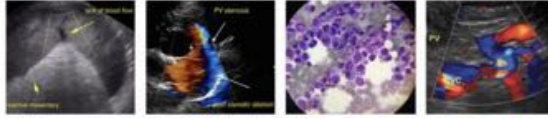
Dr.Kline

INVOICE

11994

DATE

11.10.22



PATIENT

Daisy Fisher

SPECIES

Canine

BREED

Mixed

SEX

Spayed Female

AGE

4/15/2008

WEIGHT

49.5 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

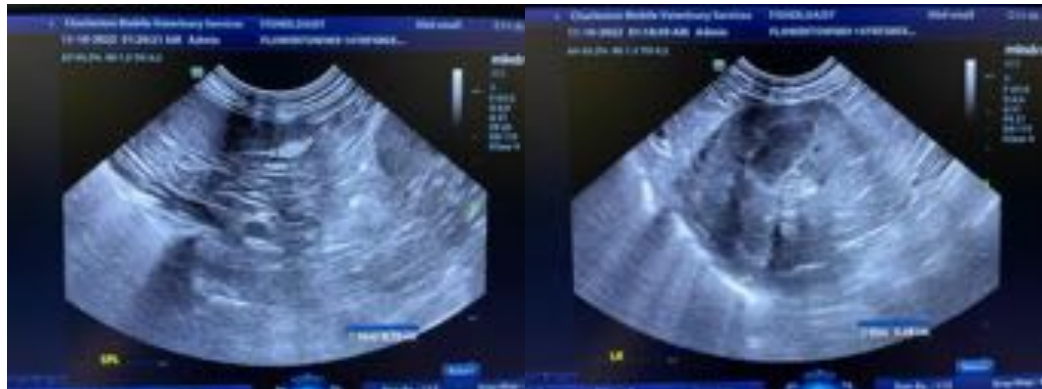
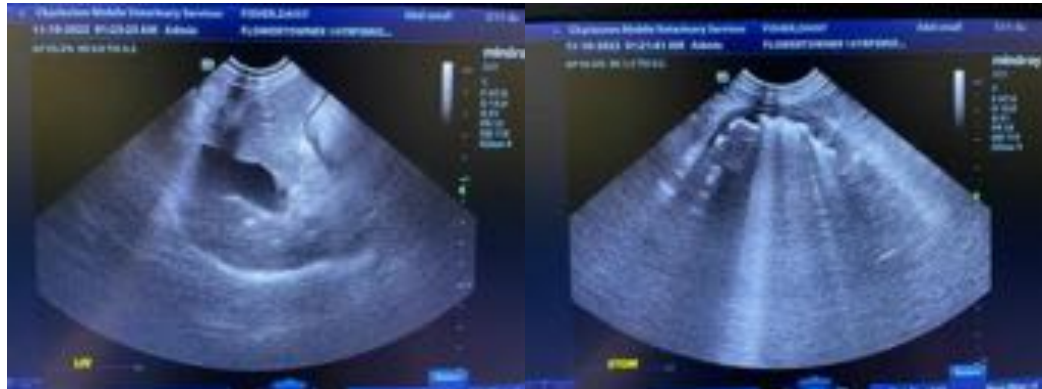
Dr.Kline

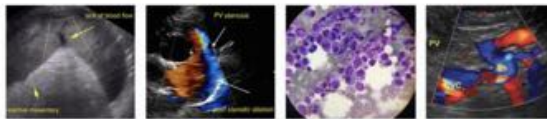
INVOICE

11994

DATE

11.10.22





PATIENT

Daisy Fisher

SPECIES

Canine

BREED

Mixed

SEX

Spayed Female

AGE

4/15/2008

WEIGHT

49.5 lbs



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

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.Kline

INVOICE

11994

DATE

11.10.22