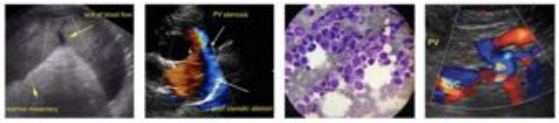


PATIENT

Duke McGrain

SPECIES

Canine

BREED

Lab Mix

SEX

Neutered Male

AGE

3.28.2013

WEIGHT

95.8 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

Brighton AH

REFERRING VET

Mackenzie Ciccone

INVOICE

11496

DATE

8.26.2022

PRESENTING CLINICAL SIGNS

History of chronic liver enzyme elevations. Most recent ALPs have been in the 700s. ALT in the mid-100s. Minimal change with Denamarin.

Clinical Exam Findings: Heart murmur increased from 2-4, noted on 7/8/22. Arthritis noted on 7/8/22. P is now on joint supplement.

Abnormal lab-work values: ALT was elevated on 7/8/22 (156), went home on Denamarin. ALT decreased on 8/5/22 (144). ALP was increased on 7/8/22 (696) and still increased on 8/5/22 (741).

Current Medications: Dasuquin daily

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 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 (1.30 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 (8.20 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The **right kidney** is normal size (8.48 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal loss of 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 (0.79 cm at cranial pole) (0.72 cm at caudal pole) (3.36 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.

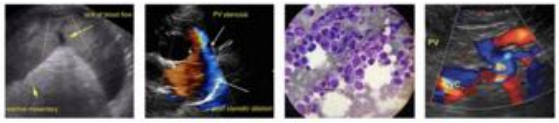
The **right adrenal gland** is normal size (0.98 cm at cranial pole) (0.70 cm at caudal pole) (2.80 cm in length); normal shape; homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

Spleen

The **spleen** is normal in size (2.15 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 normal to slightly prominent in size with normal curvilinear peripheral contours. The parenchyma is isoechoic relative to the spleen and diffusely mottled in appearance with numerous, small, ill-defined hypoechoic nodules throughout the organ. In addition, a 1.11 cm anechoic cyst is



PATIENT

Duke McGrain

SPECIES

Canine

BREED

Lab Mix

SEX

Neutered Male

AGE

3.28.2013

WEIGHT

95.8 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

Brighton AH

REFERRING VET

Mackenzie Ciccone

INVOICE

11496

DATE

8.26.2022

observed on the left side, at the caudal aspect. Hepatic vasculature and intrahepatic biliary tracts are of normal volume with no evidence of congestion.

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.

Gastrointestinal

The **stomach and intestine** are free of stasis and exhibit normal peristaltic activity. The gastric lumen is mildly distended with 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. There is no evidence of an obstructive pattern.

Pancreas

The region of the **pancreas** is isoechoic relative to surrounding omental fat. No obvious parenchymal abnormalities are observed. There is no evidence of regional 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.

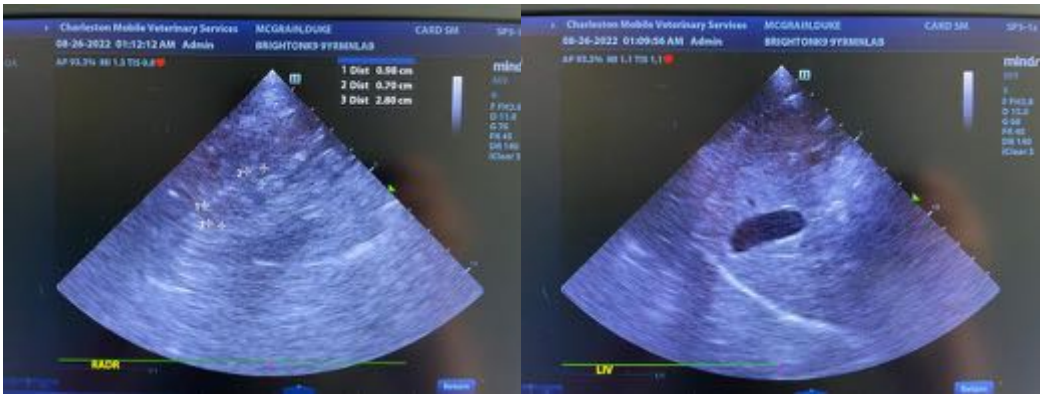
ULTRASONOGRAPHIC FINDINGS

Primary Findings

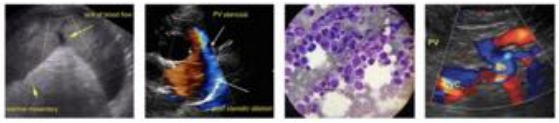
- The diffuse hepatic changes are non-specific and could be consistent with vacuolar hepatopathy, regenerative nodular hyperplasia, and/or age-related remodeling. Inflammatory and infiltrative disease are considered less likely.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

If the client would like to help rule out round cell neoplasia, consider a fine-needle aspirate of the liver, if clotting status is appropriate. A 25-gauge needle should be used. Otherwise, serial monitoring (i.e., every 3-4 months) of the patient's liver values is recommended. If values continue to increase, repeat abdominal ultrasound +/- hepatic tissue sampling may be warranted.



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

Duke McGrain

SPECIES

Canine

BREED

Lab Mix

SEX

Neutered Male

AGE

3.28.2013

WEIGHT

95.8 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

Brighton AH

REFERRING VET

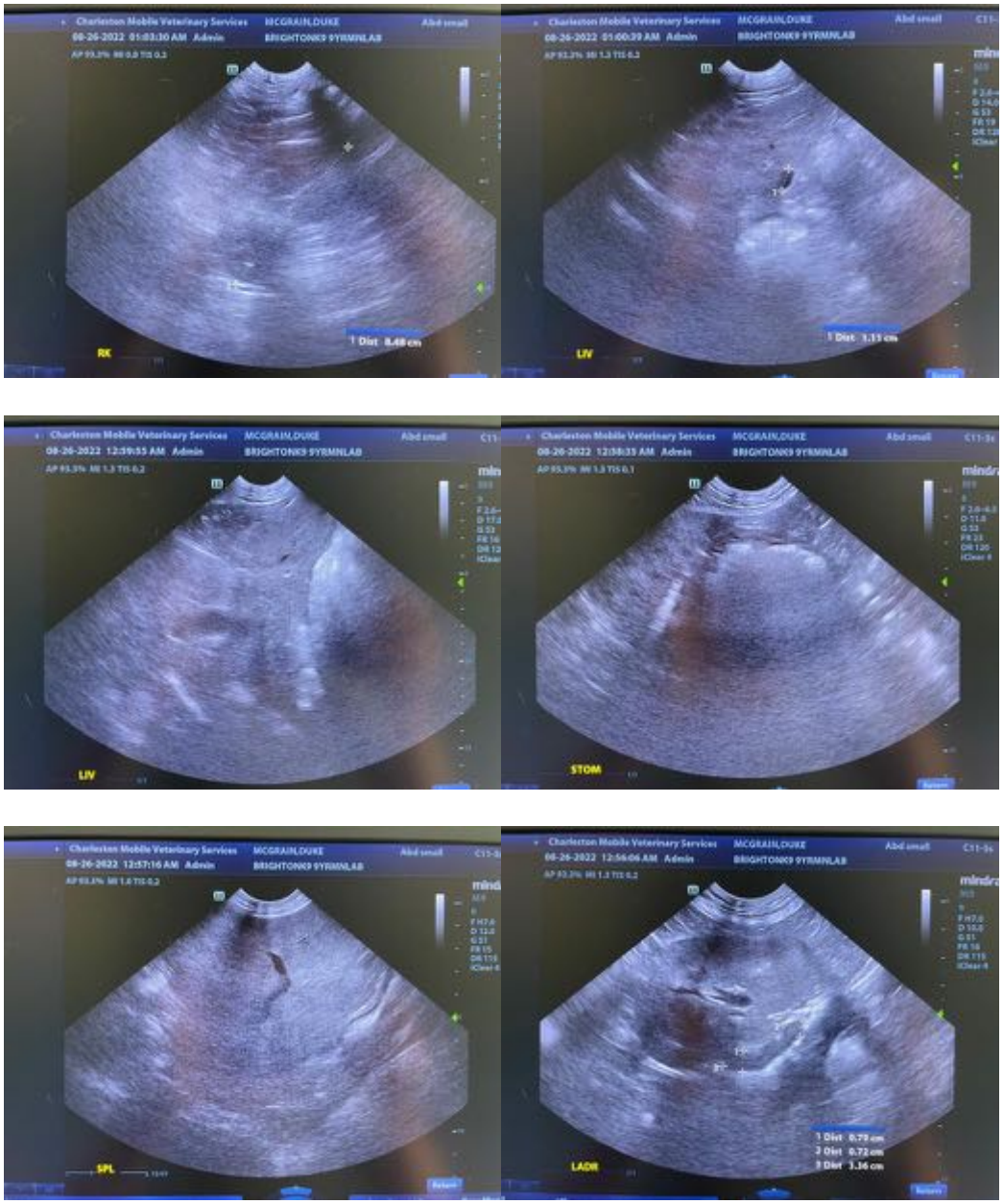
Mackenzie Ciccone

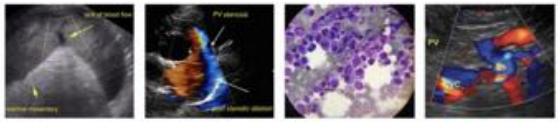
INVOICE

11496

DATE

8.26.2022





PATIENT

Duke McGrain

SPECIES

Canine

BREED

Lab Mix

SEX

Neutered Male

AGE

3.28.2013

WEIGHT

95.8 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

Brighton AH

REFERRING VET

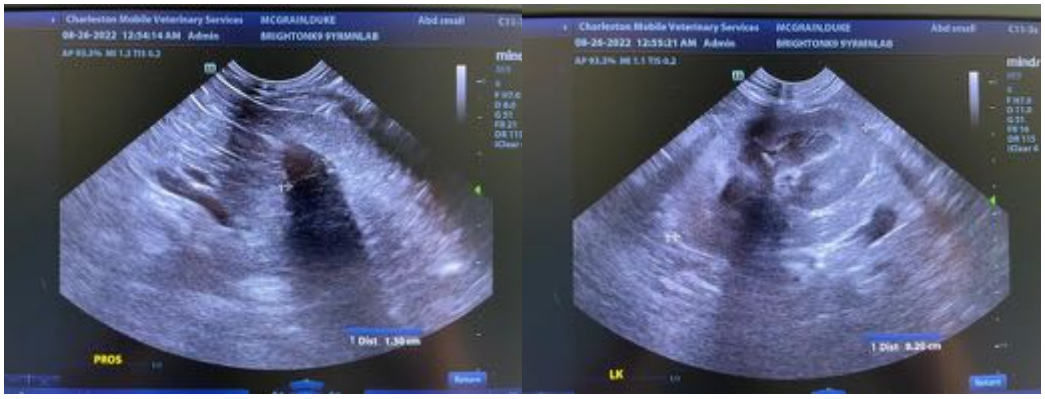
Mackenzie Ciccone

INVOICE

11496

DATE

8.26.2022



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