



PATIENT

Whiskey Carl

SPECIES

Canine

BREED

Lab/Brittany mix

SEX

Male, neutered

AGE

11 Yrs. 1 month

WEIGHT

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

Meadowlan Market
Conway

REFERRING VET

Dr. Gale

INVOICE

DATE
13695

PRESENTING CLINICAL SIGNS

Owners recently noted blood at the end of his urine stream. USG >1.050 with proteinuria. Proteinuria, pyuria and hematuria. CBC WNL. Chem panel reveals an ALT of 243, ALP of 284, 4DX negative. Pt was neutered at 9 months of age.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder wall is normal in thickness and the mucosal surface is smooth. The bladder is moderately distended. A small amount of suspended echogenic debris is observed within the lumen. No cystic calculi are observed. The region of the trigone and the proximal urethra, visible to a depth of 4 cm, are normal.

The prostate is enlarged (4.37 cm in width) with smooth peripheral contours. The parenchyma is hypoechoic relative to surrounding omental fat and mildly heterogeneous in appearance with hyperechoic to mineralized foci throughout the gland. An approximately 2.1 cm cystic area is observed within the parenchyma. The prostatic urethra is not overtly dilated.

The left kidney is normal in size (5.18 cm in length) with a slightly irregular shape. 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 or hydroureter. Renal vasculature is normal.

The right kidney is normal in size (6.85 cm in length) with a normal shape, architecture and 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 hydroureter. Renal vasculature is normal.

Adrenal Glands

The left adrenal gland is normal in size (0.68 cm at cranial pole) (0.72 cm at caudal pole) with a normal shape and 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 in size (1.07 cm at cranial pole) (0.78 cm at caudal pole) with a normal shape and 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 (2.16 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 curvilinear peripheral contours. The parenchyma is hypoechoic relative to the spleen and slightly mottled 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 aggregated, echogenic, partially dependent sludge in a partially stellate pattern is observed within the lumen. The cystic and common bile ducts are normal/not seen.



PATIENT

Whiskey Carl

SPECIES

Canine

BREED

Lab/Brittany mix

SEX

Male, neutered

AGE

11 Yrs. 1 month

WEIGHT

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

Meadowlan Market
Conway

REFERRING VET

Dr. Gale

INVOICE

DATE
13695

Gastrointestinal

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 is normal in thickness with a normal layering pattern and appropriate mural detail. Discreet masses are not identified. The ileocecolic junction and colonic wall are 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.

Lymph nodes

A 2.9 x 1.3 cm hypoechoic irregular medial iliac lymph node is visualized. In addition, a 2.07 x 1.25 cm sublumbar lymph node is seen. The mesentery surrounding the lymph nodes is mildly hyperechoic.

Free Abdomen

There is no obvious evidence of free fluid.

Other

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

ULTRASONOGRAPHIC FINDINGS

Primary Findings:

- The prostatomegaly is concerning for infiltrative neoplasia (i.e., prostatic adenocarcinoma, transitional cell carcinoma) with a lower possibility of prostatitis or hyperplasia.
- The prominent medial iliac and sublumbar lymph nodes could be consistent with metastatic disease or reactive change.

Secondary Findings:

- The hepatic changes are nonspecific and could be secondary to inflammatory disease (i.e., cholangiohepatitis, chronic hepatitis), Leptospirosis, hepatotoxicosis, infiltrative neoplasia (i.e., lymphoma), vacuolar hepatopathy, regenerative nodular hyperplasia, other hepatopathy, or some combination thereof.
- The gallbladder changes are suggestive of a developing mucocele.
- Mild bilateral nonspecific, age-related renal changes.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- A urine BRAF test is recommended to further evaluate for prostatic neoplasia. A positive test confirms neoplasia. However, a negative test does not rule out the possibility of cancer and further testing (i.e., biopsies) may be necessary to get a definitive diagnosis. Fine needle aspiration is a consideration. However, due to the concern for possible neoplasia, fine needle aspiration poses a risk as the needle track can potentially seed the abdomen with cancer cells.
- Three-view thoracic radiographs can also be considered to assess for pulmonary metastatic disease.



PATIENT

Whiskey Carl

SPECIES

Canine

BREED

Lab/Brittany mix

SEX

Male, neutered

AGE

11 Yrs. 1 month

WEIGHT

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

Meadowlan Market
 Conway

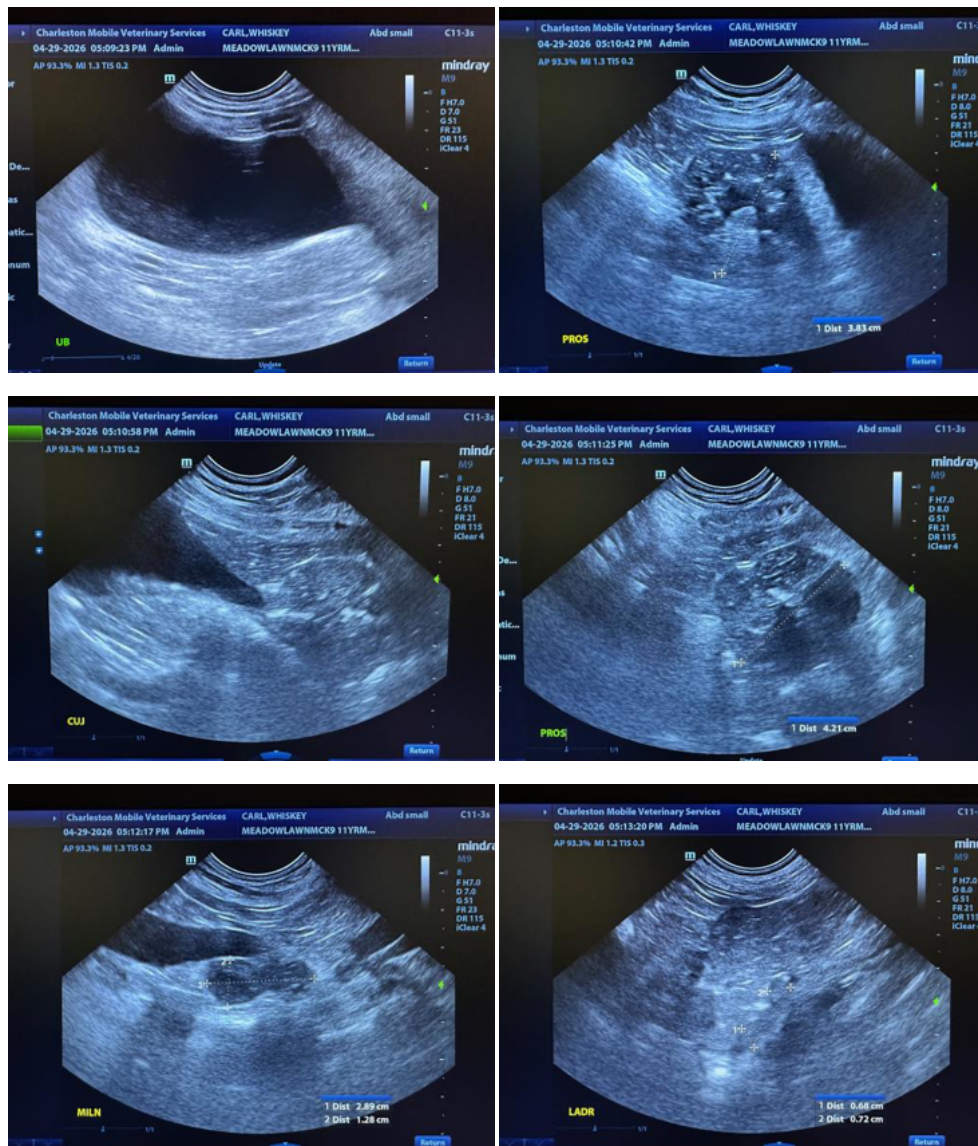
REFERRING VET

Dr. Gale

INVOICE

DATE
 13695

- Given the gall bladder changes, Ursodeoxycholic acid (Ursodiol) is recommended. Serial sonographic monitoring (e.g., every 6-8 weeks) of the gall bladder is recommended to assess for progression to a fully formed mucocele. If progression occurs, a cholecystectomy may be warranted.
- To further evaluate the elevated liver values, consider the following:
 - Pre and post-prandial serum bile acids
 - Leptospirosis testing (i.e., blood and urine PCR, serology)
 - Hepatic tissue sampling (i.e., aspirates or biopsies). Biopsies are preferred in that diseases such as chronic hepatitis and copper hepatotoxicosis require larger tissue samples to get a definitive diagnosis. If liver biopsies are pursued, aerobic and anaerobic bile cultures and hepatic copper quantitation should also be performed. Clotting times are recommended prior to tissue sampling.





PATIENT

Whiskey Carl

SPECIES

Canine

BREED

Lab/Brittany mix

SEX

Male, neutered

AGE

11 Yrs. 1 month

WEIGHT

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

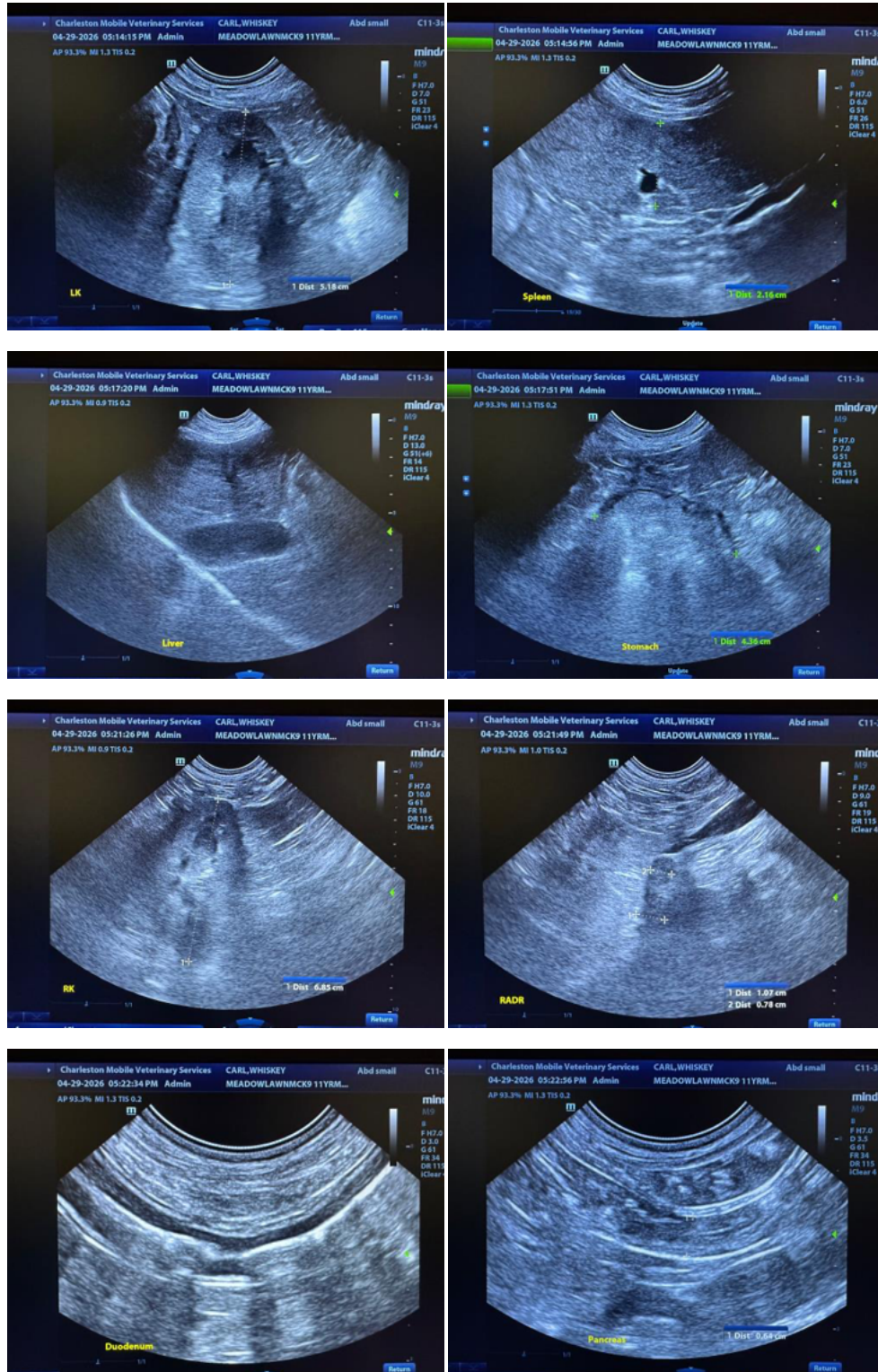
Meadowlan Market
Conway

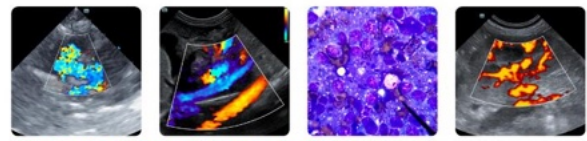
REFERRING VET

Dr. Gale

INVOICE

DATE
13695





PATIENT

Whiskey Carl

SPECIES

Canine

BREED

Lab/Brittany mix

SEX

Male, neutered

AGE

11 Yrs. 1 month

WEIGHT

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

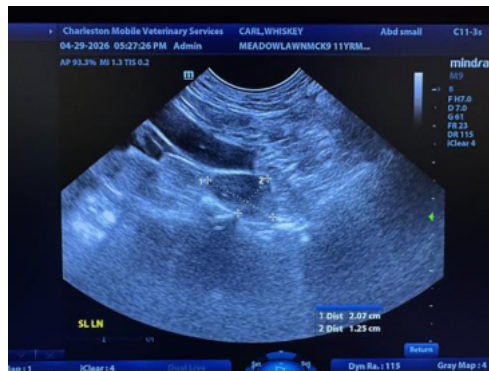
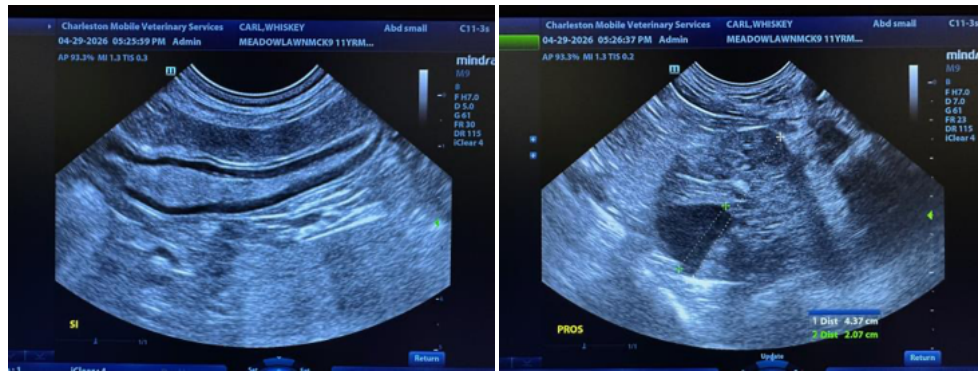
Meadowlan Market
 Conway

REFERRING VET

Dr. Gale

INVOICE

DATE
 13695



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