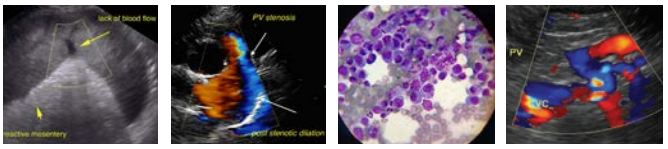
SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™



SonoPath.com
1-800-838-4268 info@sonopath.com

PATIENT
Zoe Henry

SPECIES
Canine

BREED
Doberman X

SEX
Spayed Female

AGE
14 Years

WEIGHT
35.5 Pounds

INTERPRETED BY
R. McKenzie Daniel, DVM, DABVP (Canine and Feline)

IMAGING PERFORMED BY
Diane McFadden

HOSPITAL NAME
Chester Animal Hospital

REFERRING VET
Dr. Migliaccio

INVOICE
25355

DATE
9/13/21

PRESENTING CLINICAL SIGNS

Presented this morning in full collapse; nauseous
Abnormal PE/Chem/CBC/UA Results: WBC 25.6 with neuts 22.8, PCV 53, TS 11.4, ALT 597, ALKP increased off the scale , 1bili 19.3, BUN 49, Crea approx 4.8, Phos approx 13.3, Na 171

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder presented uniformly thickened urinary bladder wall (0.54 cm) isoechoic to the adjacent normal urinary bladder wall. The luminal margin of the thickened urinary bladder wall was mildly asymmetrical in contour. This may indicate age related changes or potential mild cystitis, although full evaluation of the urinary bladder was limited owing to lack of urine distention. Mineralization or echogenic foci within the thickened areas of urinary bladder wall was not present. No evidence of neoplastic criteria. The urethra was normal to 3.0 cm.

Normal size and margination were present in the kidneys. A normal 1:3 cortex / medulla ratio was maintained. The medulla and cortices were uniform in texture with some increased echogenicity and loss of corticomedullary symmetry and definition expected for the age of the patient. Mild pyelectasia noted in the left kidney. The left kidney measured 5.7 cm. The right kidney measured 5.6 cm.

The area of the aortic trifurcation was free of pathology.

Adrenal Glands

The left adrenal gland was normal in size. Mild parenchyma heterogeneity and mild capsule asymmetry was present without suspicion for overt neoplasia. The left adrenal gland measured 2.4 cm length x 0.64 cm at the caudal pole.

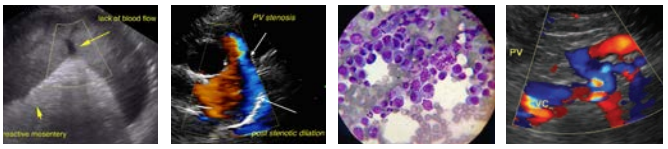
An asymmetrically marginated, hypoechoic to non-homogeneous right adrenal mass was present exhibiting pinpoint hyperechoic parenchymal foci, which may indicate pinpoint areas of mineralization. No overt vascular invasion associated with the right adrenal gland, although cannot be definitively excluded. The right adrenal gland measured 2.9 cm length x 2.1 cm at the cranial pole and 1.3 cm at the caudal pole.

Spleen

The spleen was subjectively normal in size and exhibited primarily finely textured parenchyma which was hyperechoic to the liver and renal cortical parenchyma. Mild generalized parenchyma heterogeneity was present without evidence of nodular changes. Mild asymmetrical lateral and medial capsule contour noted. The splenic vasculature at the hilus was normal in volume with no evidence of congestion or thrombosis. The parenchymal heterogeneity is likely consistent with benign changes such as extramedullary hematopoiesis or age related remodeling with minor potential for inflammatory or neoplastic disease.

Liver

The liver was subjectively normal in size, structure, and contour. Generalized mild decreased hepatic parenchyma echogenicity was noted with moderate coarse echotexture. The hepatic and portal vasculature were normal in appearance without signs of congestion. The gallbladder exhibited mild to moderate distention with mildly prominent to echogenic gallbladder walls along with mild, non-dependent yet non-organized luminal debris extending into the cystic bile duct. The common bile duct exhibited significant yet variable distention to the level of the duodenal papilla. The mid common bile duct measured 1.6 cm in diameter. The distal common bile duct measured 0.4 cm in diameter. Subjectively, the duodenal papilla appeared to be sonographically unremarkable, measuring 0.4 cm in



SonoPath.com
1-800-838-4268 info@sonopath.com

PATIENT

Zoe Henry

SPECIES

Canine

BREED

Doberman X

SEX

Spayed Female

AGE

14 Years

WEIGHT

35.5 Pounds

INTERPRETED BY

R. McKenzie Daniel, DVM, DABVP (Canine and Feline)

IMAGING PERFORMED BY

Diane McFadden

HOSPITAL NAME

Chester Animal Hospital

REFERRING VET

Dr. Migliaccio

INVOICE

25355

DATE

9/13/21

diameter. Peripheral gallbladder and common bile duct inflammation was present. No evidence of concurrent effusion or overt bile peritonitis.

Gastrointestinal

The stomach presented wall thickening secondary to echogenic mucosa hypertrophy. Intact wall layering was maintained and distinct. Minor retained anechoic pyloric fluid.

The small intestine presented intact wall layering with 1:3 muscularis/mucosa ratio. The lumen of the small intestine was empty with no signs of ileus, obstruction or foreign material.

Normal visible colon wall layers were present with apparent formed feces in lumen.

Pancreas

The pancreas was normal in size and contour with heterogeneous to mixed echogenic parenchyma compared to adjacent omentum. No signs of active inflammation or neoplasia.

Free Abdomen

No overt evidence of pericardial effusion or masses.

ULTRASONOGRAPHIC FINDINGS

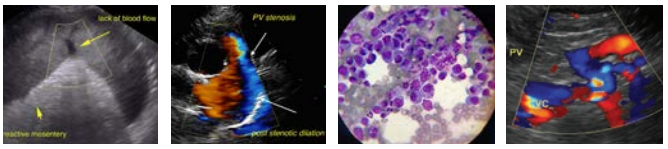
- Hepatopathy – subjectively acute on chronic
- Distended gallbladder with generalized significant yet variable common bile duct dilation to the level of the duodenal papilla with gallbladder and common bile duct mucus.
- Associated peripheral gallbladder and common bile duct inflammation.
- Concurrent right adrenal mass with pinpoint hyperechoic foci – concern for pheochromocytoma, other neoplasia (adenocarcinoma or other), hyperplasia, adenomatous change possible.
- Mild gastritis with gastric stasis
- Bilateral chronic renal changes with mild left kidney pyelectasia
- Heterogeneous to mixed echogenic pancreas – age related pancreatic changes with potential for chronic active or mixed inflammatory pattern.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The left kidney pyelectasia may be owing to chronic renal changes, potential pelvic scarring possibly owing to previous calculi passage, IV fluid therapy (if applicable). Urine C/S and protein: creatinine ratio on sterile urine sample is recommended.

The appearance of the gallbladder and degree of common bile duct dilation is consistent with post-hepatic obstruction. This may potentially be owing to mucus plug at the level of the duodenal papilla given the presence of mucus in the gallbladder and common bile duct, although other obstructive pathology such as non-visualized calculi or occult neoplasia cannot be excluded. However, a complicating factor in this case is the presence of the right adrenal mass with concern for pheochromocytoma.

Assessment of systemic blood pressure is recommended if not done. Ideally, if possible, CT assessment for further clarification of the right adrenal mass as well as surgical planning pertaining to the right



SonoPath.com
1-800-838-4268 info@sonopath.com

PATIENT

Zoe Henry

SPECIES

Canine

BREED

Doberman X

SEX

Spayed Female

AGE

14 Years

WEIGHT

35.5 Pounds

INTERPRETED BY

R. McKenzie Daniel, DVM, DABVP (Canine and Feline)

IMAGING PERFORMED BY

Diane McFadden

HOSPITAL NAME

Chester Animal Hospital

REFERRING VET

Dr. Migliaccio

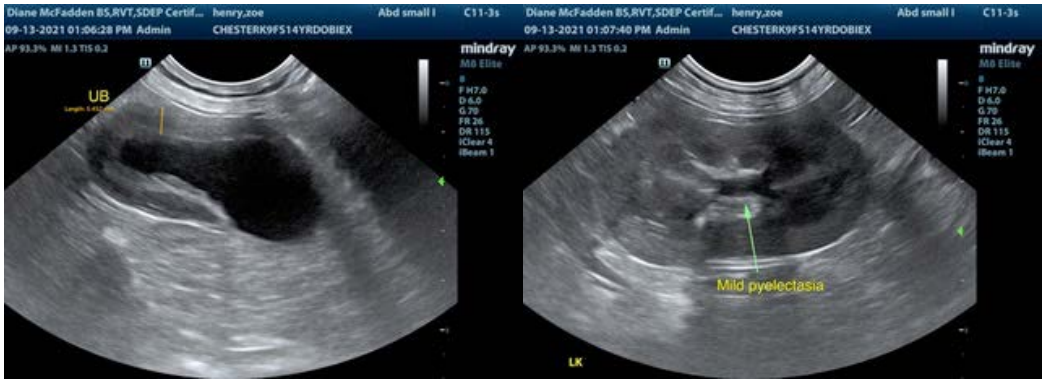
INVOICE

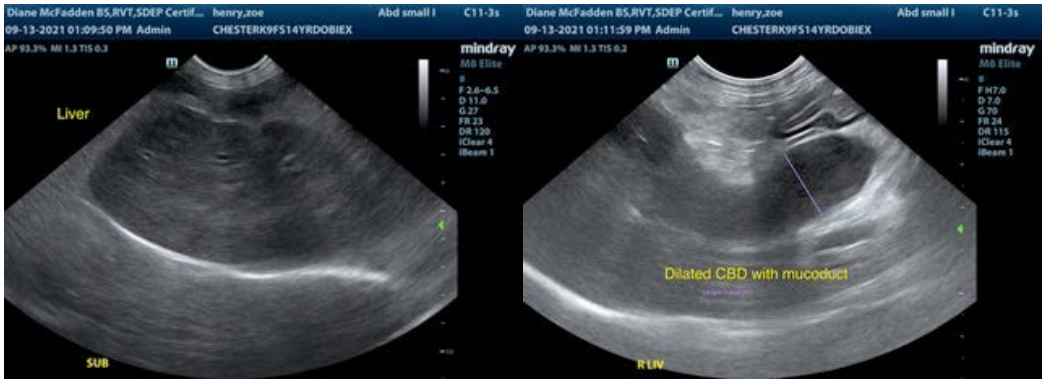
25355

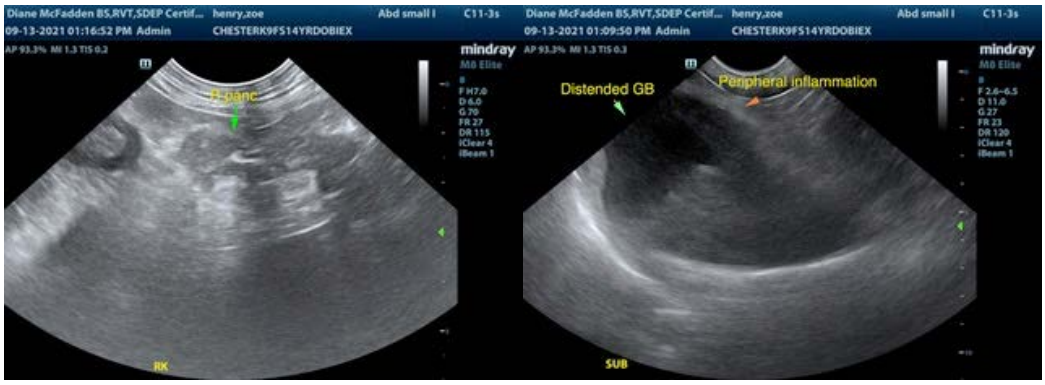
DATE

9/13/21

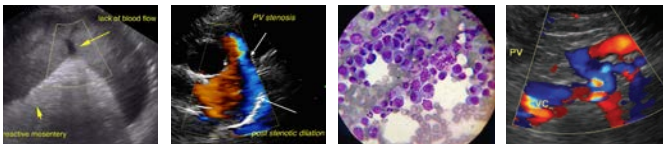
adrenal mass as well as common bile duct is recommended. Very guarded prognosis indicated. 3-view chest radiographs recommended prior to any surgical considerations.







SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™



SonoPath.com
1-800-838-4268 info@sonopath.com

PATIENT

Zoe Henry

SPECIES

Canine

BREED

Doberman X

SEX

Spayed Female

AGE

14 Years

WEIGHT

35.5 Pounds

INTERPRETED BY

R. McKenzie Daniel, DVM, DABVP (Canine and Feline)

IMAGING PERFORMED BY

Diane McFadden

HOSPITAL NAME

Chester Animal Hospital

REFERRING VET

Dr. Migliaccio

INVOICE

25355

DATE

9/13/21

The information and recommendations provided are based on the images presented by the referring veterinarian. 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.

R. McKenzie Daniel, DVM, DABVP (Canine / Feline Practice)
info@SonoPath.com