



PATIENT

Ella Howie

SPECIES

Canine

BREED

Cockapoo

SEX

Spayed Female

AGE

9

WEIGHT

12 kg

INTERPRETED BY

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

IMAGING PERFORMED BY

Dr. Belan

HOSPITAL NAME

McKnight 24 HR AH

REFERRING VET

Dr. Gavin

INVOICE

13243

DATE

2/3/22

PRESENTING CLINICAL SIGNS

Medicated epileptic on phenobarb and diazepam. Mild elevation of liver enzymes and inappropriate urinations. Attending concerned about possible concurrent Cushings

Abnormal PE/Chem/CBC/UA Results: Mild elevation of liver enzymes

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder presented uniformly thickened ventral to ventroapical urinary bladder wall isoechoic to the adjacent normal urinary bladder wall. The luminal margin of the thickened urinary bladder wall was mildly asymmetrical in contour. The ventroapical urinary bladder wall thickness measured 0.45 cm width. Mineralization or echogenic foci within the thickened areas of urinary bladder wall was not present. The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra exhibited normal tone to a depth of 2.0 cm. Anechoic urine was present in the lumen with no calculi or sediment. The ureteral papillae were normal. The ureters were not visible which is normal. No distinct urinary bladder masses were noted.

The area of the aortic trifurcation was free of pathology.

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 mild loss of corticomedullary symmetry and definition expected for the age of the patient. No evidence of pelvic dilation was present. Pinpoint medullary mineral was present in both kidneys. No pyelectasia was note in either kidney. The left kidney measured 4.9 cm length. The right kidney measured 5.7 cm length.

Adrenal Glands

The left adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 0.51 cm width at the caudal pole and 0.49 cm width at the cranial pole. The right adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The right adrenal gland measured 0.59 cm width at the caudal pole and 0.78 cm width at the cranial pole.

Spleen

The spleen exhibited a finely textured and homogenous parenchyma which was hyperechoic to the liver and renal cortical parenchyma. The capsule was smooth and regular without apparent expansion. The splenic vasculature at the hilus was normal in volume with no evidence of congestion or thrombosis. Acute to chronic inflammatory, neoplastic, or benign parenchyma changes were not noted.

Liver/ Gallbladder

The liver exhibited mild to moderate enlargement potentially more prominent in the mid to right liver, although not definitive. The parenchyma of the liver was subjectively normal in echogenicity compared to the spleen and renal cortices. The liver parenchyma was uniform with a mildly coarse echotexture. The capsule of the liver was symmetrically rounded to mildly swollen in margination. The hepatic and portal vasculature were normal in appearance without signs of congestion. The gallbladder was non-



PATIENT

Ella Howie

distended in size with mild, nondependent yet nonorganized, nonmineralized gallbladder debris. The cystic and common bile ducts were normal.

SPECIES

Canine

Gastrointestinal

The stomach presented intact wall layering with a normal wall layer ratio. The lumen of the stomach contained moderate, nonshadowing ingesta most consistent with post prandial presentation without signs of ileus, obstruction or foreign material.

BREED

Cockapoo

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.

SEX

Spayed Female

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

AGE

9

Pancreas

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

WEIGHT

12 kg

Free Abdomen

No overt lymphadenopathy or peritoneal effusion was present.

ULTRASONOGRAPHIC FINDINGS

INTERPRETED BY

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

Primary Findings

- Mild ventral to ventroapical cystitis pattern
- Mild age-related renal changes with pinpoint medullary mineral
- Benign hepatopathy - vacuolar hepatopathy, nonspecific hepatitis/cholangiohepatitis (infectious, immune-mediated, or other), secondary hepatopathy owing to Phenobarbital medication, mild nonobstructive cholestasis possible, no overt evidence of neoplastic criteria
- Mild gallbladder debris (non-mucocele)

IMAGING PERFORMED BY

Dr. Belan

Secondary Findings

- Mild heterogeneous pancreas - nonspecific, normal or early age-related variant, minor parenchymal remodeling owing to previous inflammation with chronic pancreatitis considered less likely
- Gastric ingesta - likely post prandial presentation

HOSPITAL NAME

McKnight 24 HR AH

REFERRING VET

Dr. Gavin

INVOICE

13243

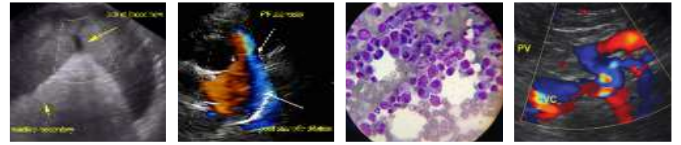
DATE

2/3/22

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The bilateral adrenal glands were not overtly suggestive of hyperplasia or hyperadrenocorticism. Full adrenal workup could be considered if strong clinical suspicion i.e., PU/PD, polyphagia, or decreased urine specific gravity, are present.

Hepatosupportive medications including Denamarin and Ursodiol may prove beneficial. Further renal staging to include urine C/S and protein: creatinine ratio on sterile urine sample may be considered.



PATIENT

Ella Howe

SPECIES

Canine

BREED

Cockapoo

SEX

Spayed Female

AGE

9

WEIGHT

12 kg

INTERPRETED BY

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

IMAGING PERFORMED BY

Dr. Belan

HOSPITAL NAME

McKnight 24 HR AH

REFERRING VET

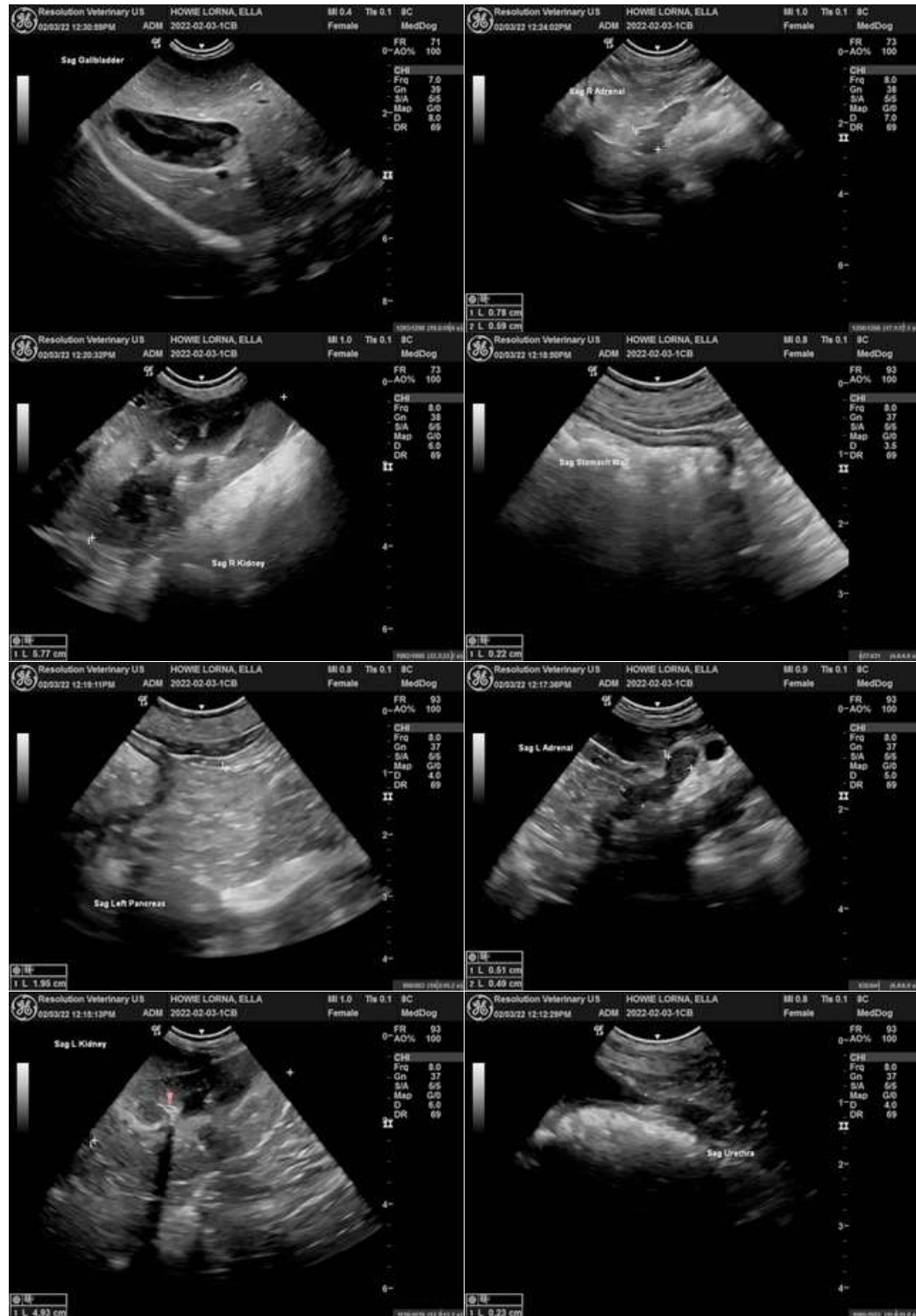
Dr. Gavin

INVOICE

13243

DATE

2/3/22





PATIENT

Ella Howe

SPECIES

Canine

BREED

Cockapoo

SEX

Spayed Female

AGE

9

WEIGHT

12 kg

INTERPRETED BY

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

**IMAGING
PERFORMED BY**

Dr. Belan

HOSPITAL NAME

McKnight 24 HR AH

REFERRING VET

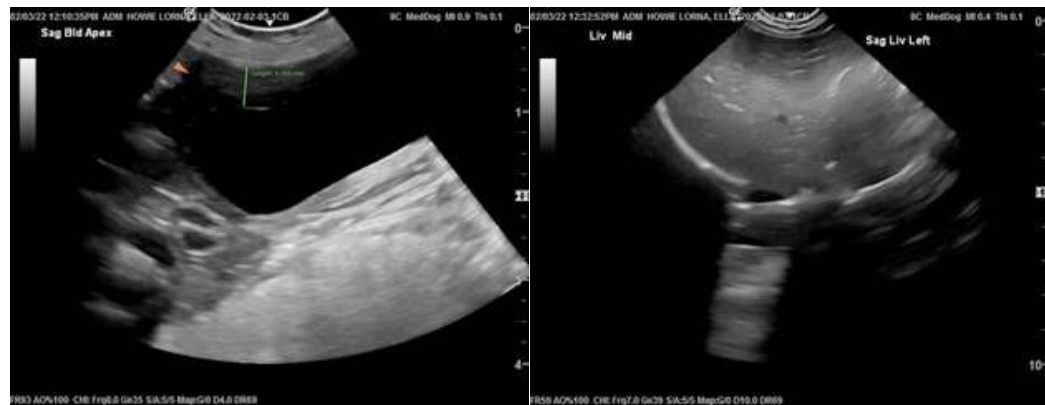
Dr. Gavin

INVOICE

13243

DATE

2/3/22



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.

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