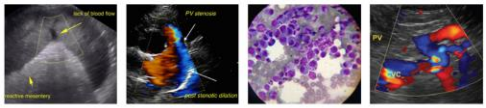


PATIENT

Emma Cervelli

SPECIES

Canine

BREED

Miniature Australian Cattle Dog

SEX

FS

AGE

12yr

WEIGHT

22lb

INTERPRETED BY

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

IMAGING PERFORMED BY

Pamela Harrigan, RDCS

HOSPITAL NAME

VCA Hanson Animal Hospital

REFERRING VET

Dr. Oscar

INVOICE

12064ag

DATE

10/31/2022

PRESENTING CLINICAL SIGNS

10/6/22 Disorientation at night and will walk into corner and then find her way out. Urinated twice this week in the house, this is rare. Seems stiff when she gets up in the morning and slipping around in a panic. No coughing and sneezing; sleeping more. No vomiting or diarrhea. -PE: Osteoarthritis hips and stifles. Suspect Cognitive Dysfunction.

Abnormal PE/Chem/CBC/UA Results: LABS: AST 89, ALT 307, ALP 1380, BG 35, USG 1.009.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of 2 cm exhibited normal thickness and tone. Anechoic urine was present in the lumen with mild dependent to non-dependent sediment with focal pinpoint dependent mineral. The sediment may indicate cellular debris / protein, crystalline debris, lipid, or mucus with likely passage of mineral from the kidneys. The ureteral papillae were normal. The ureters were not visible which is normal. No evidence of inflammatory or neoplastic changes were noted.

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 moderate loss of corticomedullary symmetry and definition expected for the age of the patient. No evidence of pelvic dilation was present. Areas of medullary mineral to non-obstructive renoliths were present. The left kidney measured 7.1 cm in length. The right kidney measured 6.9 cm in length.

The area of the aortic trifurcation was free of pathology.

Adrenal Glands

The left adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 0.58 cm width at the caudal pole and 0.58 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 0.57 cm width at the caudal pole and 0.54 cm width at the cranial pole.

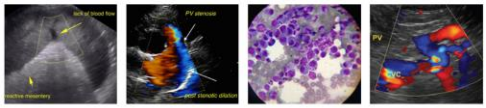
Spleen

The spleen 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. 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. 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. A large irregular mixed echogenic mass occupying the majority of the mid to right liver was present measuring ~ 12 cm in diameter. The liver parenchyma was mildly nonuniform and hypoechoic to the spleen with a moderate coarse echotexture and subjective mild to benign parenchymal remodeling. The hepatic and portal vasculature were normal in appearance without signs of congestion. The gallbladder was non-distended in size with thin walls and primarily anechoic luminal content with moderate non-dependent mild congealed hyperechoic debris. No evidence of gallbladder or peripheral gallbladder inflammation was present. The cystic and common bile ducts were normal.

Gastrointestinal



PATIENT

Emma Cervelli

SPECIES

Canine

BREED

Miniature Australian Cattle Dog

SEX

FS

AGE

12yr

WEIGHT

22lb

INTERPRETED BY

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

IMAGING PERFORMED BY

Pamela Harrigan, RDCS

HOSPITAL NAME

VCA Hanson Animal Hospital

REFERRING VET

Dr. Oscar

INVOICE

12064ag

DATE

10/31/2022

The stomach presented intact wall layering with a normal wall layer ratio. The lumen of the stomach was empty with no signs of ileus, obstruction or foreign material.

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. No evidence of pathology at the level of the ileocolic junction.

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

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. This finding is likely consistent with age related pancreatic changes and considered incidental.

Free Abdomen

No omental masses or peritoneal effusion was present.

Multiple enlarged, hypoechoic mesenteric root lymph nodes were present. The lymph nodes exhibited symmetrical to rounded margination with abnormal width: length ratio (>0.5). The enlarged lymph nodes were bordered by echogenic to reactive mesentery. The mesenteric root lymph nodes measured 2.8 cm length and 1.5 cm width.

ULTRASONOGRAPHIC FINDINGS

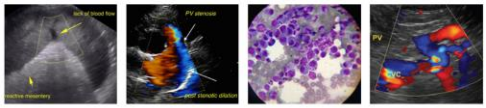
- Large irregular liver mass
- Multiple variably sized mesenteric root lymphadenopathy
- Bilateral chronic renal changes with medullary mineral to small renoliths
- Urinary bladder sediment to dependent pinpoint mineral
- Moderate gallbladder debris (non-mucocele)

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The liver mass is sonographically consistent with neoplastic criteria. The mesenteric root lymphadenopathy meets neoplastic to metastatic criteria. Benign etiologies are possible yet considered less likely.

Assuming normal clotting status and using a 25g needle, hepatic mass/mesenteric root lymph node FNA for screening cytology is warranted for further assessment and potential for oncology consult. A urine C/S on a sterile urine sample is suggested if evidence of inflammatory sediment. Three view chest radiographs are recommended if not done to assess for occult thoracic pathology.

PAUS
Pet Animal Ultrasound Service
4paus.com 781-635-5677



SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
1-800-838-4268 info@sonopath.com SonoPath.com

PATIENT

Emma Cervelli

SPECIES

Canine

BREED

Miniature Australian Cattle Dog

SEX

FS

AGE

12yr

WEIGHT

22lb

INTERPRETED BY

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

IMAGING PERFORMED BY

Pamela Harrigan, RDCS

HOSPITAL NAME

VCA Hanson Animal Hospital

REFERRING VET

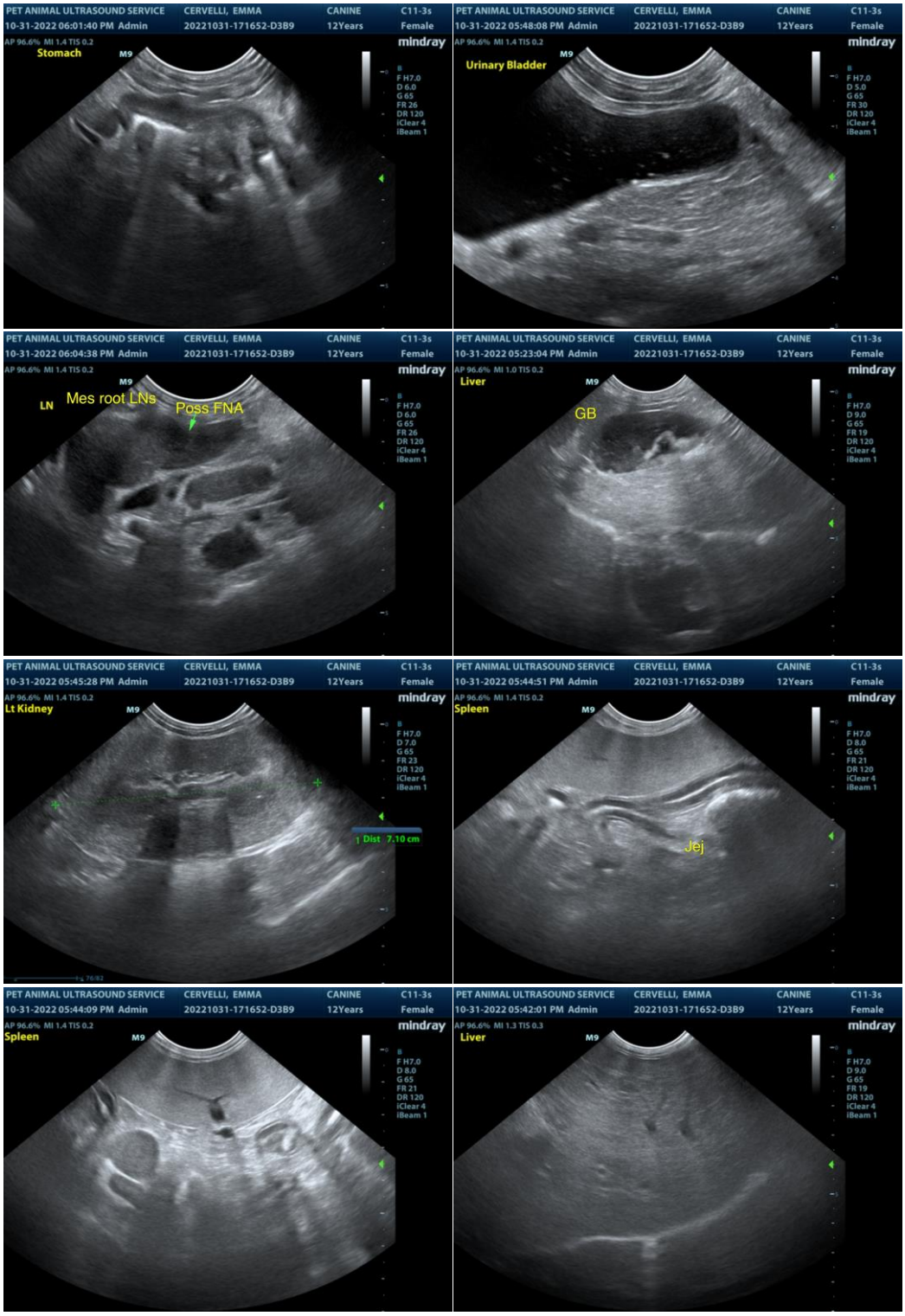
Dr. Oscar

INVOICE

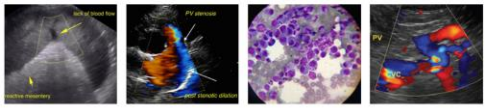
12064ag

DATE

10/31/2022



PAUS
Pet Animal Ultrasound Service
4paus.com 781-635-5677



SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
1-800-838-4268 info@sonopath.com SonoPath.com

PATIENT

Emma Cervelli

SPECIES

Canine

BREED

Miniature Australian Cattle Dog

SEX

FS

AGE

12yr

WEIGHT

22lb

INTERPRETED BY

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

IMAGING PERFORMED BY

Pamela Harrigan, RDCS

HOSPITAL NAME

VCA Hanson Animal Hospital

REFERRING VET

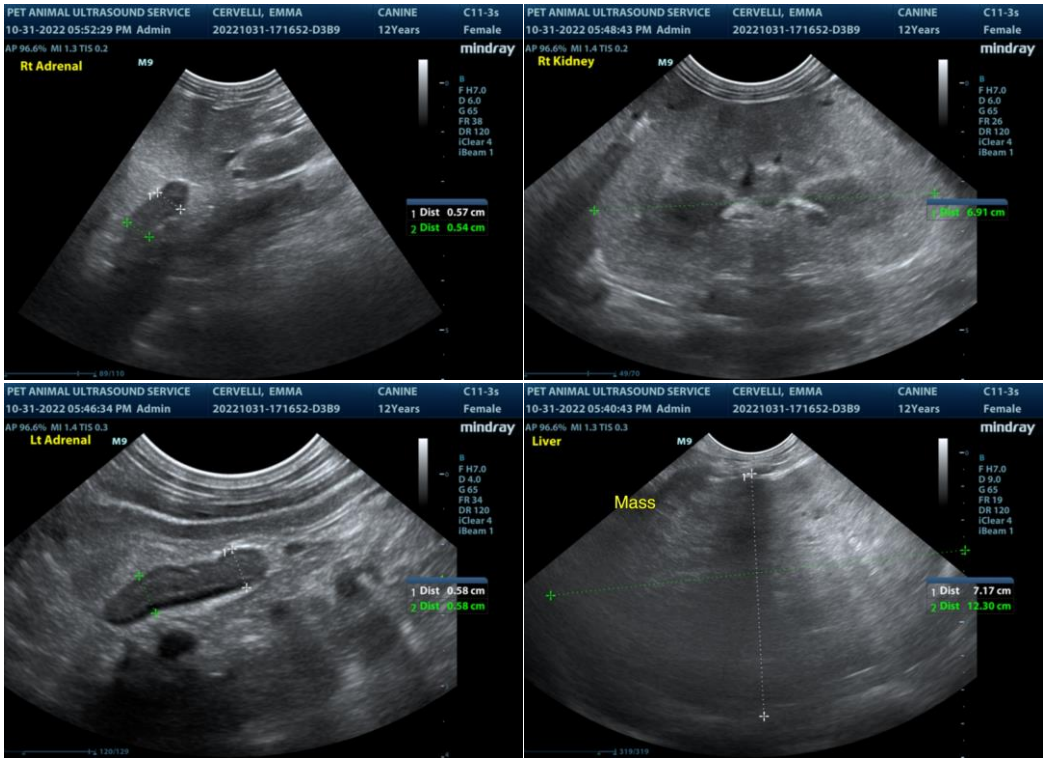
Dr. Oscar

INVOICE

12064ag

DATE

10/31/2022



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.

R. McKenzie Daniel, DVM, DABVP (Canine / Feline Practice)

info@SonoPath.com