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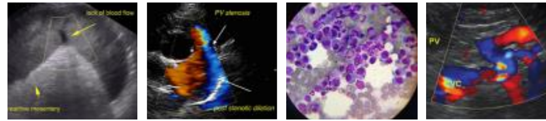


ANIMAL SOUNDS NW
MOBILE VETERINARY ULTRASOUND
IMAGING PERFORMED BY
AnimalSoundsNW.com 541-357-9423

PATIENT

Chewy Chizacky

SPECIES

Canine

BREED

Chihuahua

SEX

Neutered Male

AGE

12 Years

WEIGHT

9 Pounds

INTERPRETED BY

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

IMAGING PERFORMED BY

Sara Hansen

HOSPITAL NAME

VCA Delta Oaks

REFERRING VET

Dr. Garretson

INVOICE

23858

DATE

8/9/23

PRESENTING CLINICAL SIGNS

History: Chronic vomiting (since adoption approx 2 year ago). O reports increased frequency the last 1-2 weeks (mixture of undigested food and bile). P is having periods of inappetance as well. Cerenia and Entyce help but symptoms recur if not given. O has tried hydrolyzed diet but P is picky and wont eat it for more than a few days (diet trials not feasible). O reports generalized lethargy for 2ish weeks, urinating/defecating normally. Hx grade 4/6 heart murmur (suspect Mitral valve insufficiency) Asymptomatic att

Abnormal PE/Chem/CBC/UA Results: ABNORMAL Laboratory Findings July 25, 2023: Stress leukogram BUN 32 CREA 1.3 SDMA 16.2 Current Medications Proviable, Cerenia, Entyce Radiographic Findings August 2, 2023: 3 orthogonal whole body views were available for review. Films compared to radiographs dated 1/16/23. Nodular pulmonary metastatic disease is not identified. Intrathoracic lymphomegaly is not identified. Although the vertebral heart score is unremarkable at ~10.6, there is left heart enlargement, the left atrium is large (best seen on the RLAT view). The pulmonary pattern is unremarkable. Serosal margin detail is unremarkable. The liver is unremarkable. The spleen is unremarkable. The right kidney was not measured for size, the left is at the low end of normal for size measuring approximately 2.5 times the length of L2. There is mild to moderate distention of the urinary bladder. The prostate is not seen. The stomach contains a small amount of gas and fluid. The small intestines contain gas and fluid and are unremarkable for size. There is gas and fecal material in the colon. Assessment: Suspect left heart enlargement. Possible mitral insufficiency. A murmur was reported. Heart failure was not identified. Consider an echo for a more quantitative assessment of the heart and reported murmur. Unremarkable visible abdomen. A small intestinal mechanical obstruction was not identified. Infiltrative bowel disease (inflammatory, neoplasia) was not confirmed or excluded on this exam. Consider a CE-IBD test, abdominal ultrasound, checking cobalamin, folate, cPLI/PSL, and TLI if infiltrative bowel disease is of concern. Rule out a food allergy and dysbiosis.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

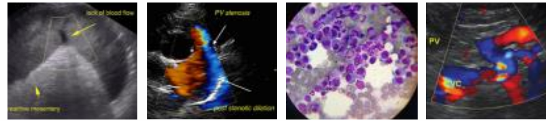
The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of 2.0 cm exhibited normal thickness and tone. Anechoic urine was present in the lumen with no uroliths or sediment. The ureteral papillae were normal. The ureters were not visible which is normal. No evidence of inflammatory or neoplastic changes were noted. Aortic trifurcation was normal.

The residual prostate 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. Minor areas of medullary mineral were present. The left kidney measured 3.3 cm in length. The right kidney measured 3.6 cm in length.

Adrenal Glands

The left adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 1.4 cm length x 0.39 cm width at the caudal pole.



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The right adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The right adrenal gland measured 1.6 cm length x 0.39 cm width at the caudal 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

The liver was subjectively normal in size, structure, and contour. The liver parenchyma was uniform and hypoechoic to the spleen with a mild coarse echotexture. 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. The cystic and common bile ducts were normal.

Gastrointestinal

The stomach presented intact wall layering with a normal wall layer ratio. The lumen of the stomach was empty without evidence of retained ingesta, fluid or foreign material.

The small intestine exhibited generalized intact wall layering with subjective propensity for borderline prominent duodenojejunal mucosa. No evidence of intestinal mechanical/metabolic ileus, loss of intestinal wall layering or intestinal masses to the level of the colon. The duodenum wall measured 0.39 cm. The jejunum wall measured 0.36 cm.

Sonographically normal wall layering was noted in the colon. The colon contained formed to semi formed fecal matter.

Pancreas

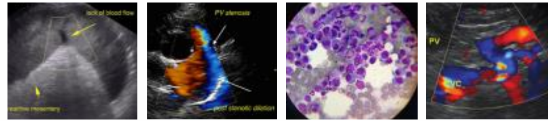
The parenchyma of the left limb, body and right limb of the pancreas presented isoechoic to the adjacent omental fat. A normal curvilinear capsule contour of the pancreas was present. The visible pancreatic duct was normal. No signs of active inflammation or neoplastic disease was evident.

ULTRASONOGRAPHIC FINDINGS

- Mild chronic renal changes
- Sonographically unremarkable empty stomach
- Intact subjective borderline prominent small bowel walls- nonspecific
- Normal pancreas

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

No evidence of significant visceral pathology as an obvious cause of the patients clinical signs. Although potential for patient variant, subjective prominent small bowel mucosa may suggest mild



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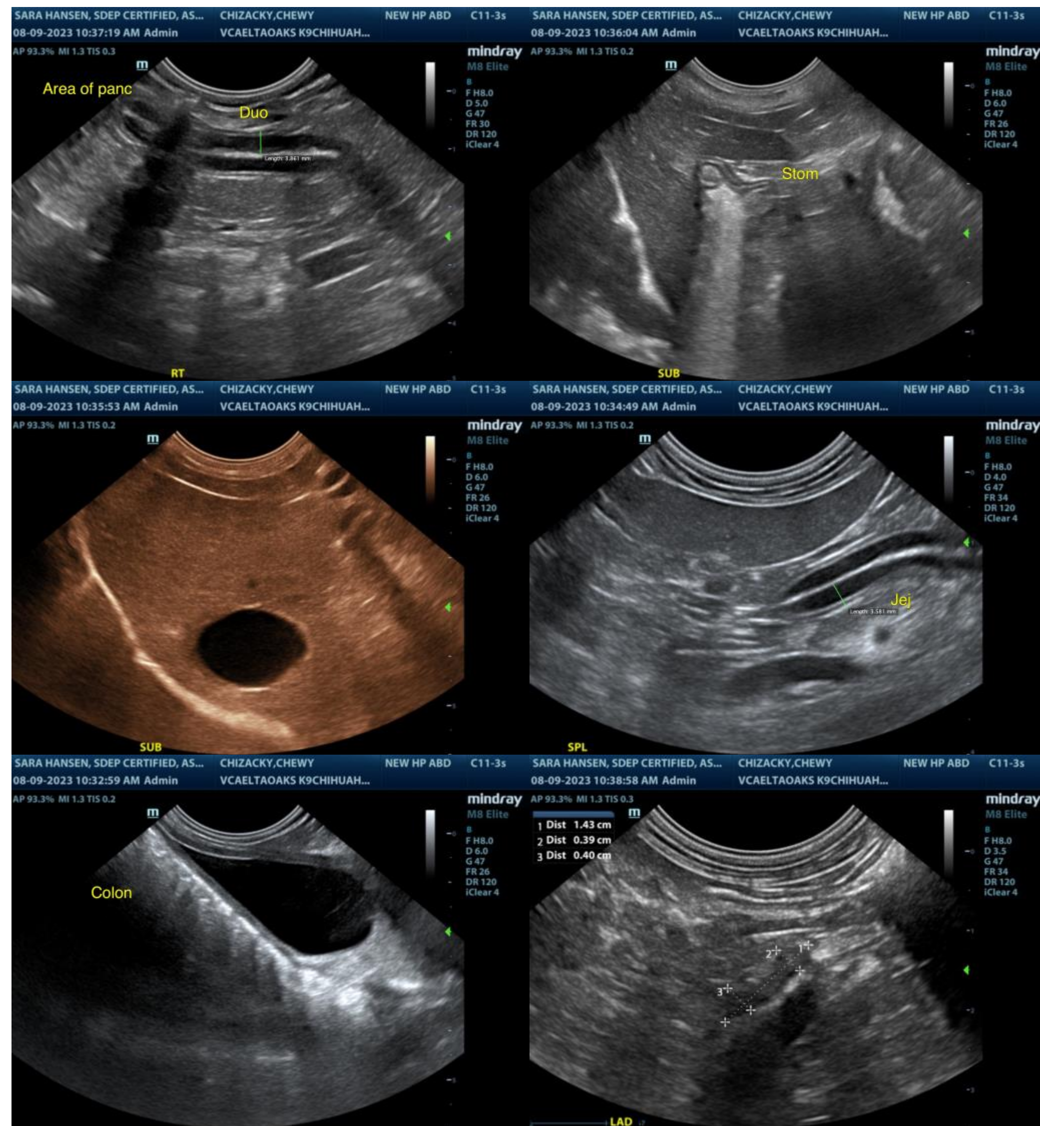
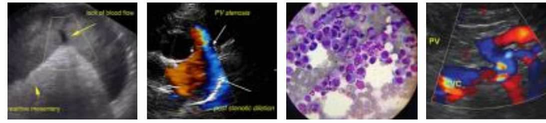
inflammatory enteropathy criteria. However, given no additional gastrointestinal signs, i.e., diarrhea or reported weight loss, the small intestinal interpretation is nonspecific. Dietary intolerance, food allergy, nonspecific mild inflammatory gastroenteropathy and low-grade pancreatitis (which may present sonographically normal) are all potentials. No evidence of intraabdominal neoplastic criteria.

Ideally, novel protein or hydrolyzed diet, amendable to the patient, with likely long term dietary therapy, gastroprotectants, Omeprazole (1 mg/kg PO SID over the next 3 weeks) and assessment of clinical response is suggested.

A GI panel to include PLI/TLI/Cobalamin/Folate and screening resting cortisol level to assess for occult disease as contributing factors may be considered.





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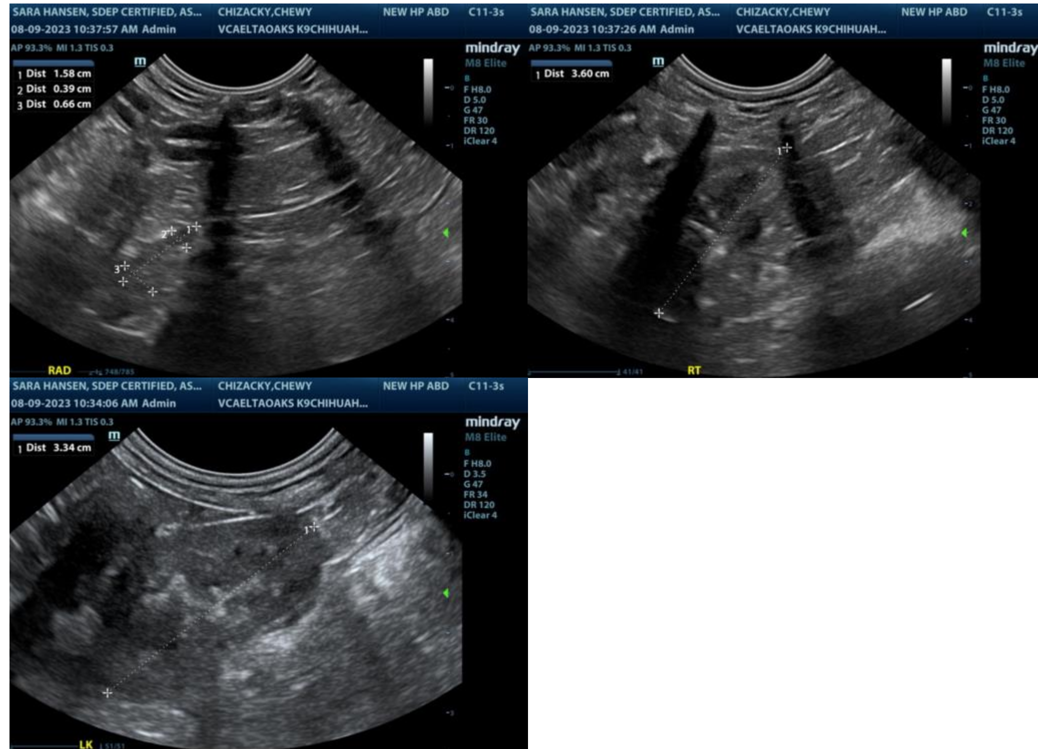

The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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