



PATIENT

Herman Cochran

SPECIES

Canine

BREED

Boston Terrier

SEX

Neutered male

AGE

12 years

WEIGHT

10.6 kg

INTERPRETED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

IMAGING PERFORMED BY

Erin Wicks

HOSPITAL NAME

Shores VEC

REFERRING VET

Dr. Zippay

INVOICE

42408

DATE

12/30/22

PRESENTING CLINICAL SIGNS

History: Presented at our hospital for V+ and coughing up blood. Last night after meal K9 vomited up his meal and there were multiple dark and bright red blood clots in the vomitus. K9 was ADR/lethargic afterword but is acting N otherwise now. Previous Health Concerns: OS Torn Cornea, Incontinence, Allergies Current Medications: Apoquel, Proin, Biohance and Ofloxacin eye drops, K9 has Gabapentin but it has been ~2wks since given.

Abnormal PE/Chem/CBC/UA Results: Abdominal: abd distension, no fluid wave, sl tense on palp Blood work – Chol 382, ALT >1000, ALP>993, GGT 77, Plt 614, Lact 4.2 Radiographs – liver enlargement and suspected gallbladder enlargement, empty stomach, possibly thickened, empty GI tract other than sl gas in ileocecal junction, possible heart enlargement but also not true inspiration and breed

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN *Urinary System*

The **urinary bladder**, trigone, and pelvic urethra presented normal thicknesses and normal tone. The ureters were not visible which is normal. No uroliths or sediment were visualized and anechoic urine was present. No evidence of inflammatory or neoplastic changes was noted. Ureteral papillae were normal.

The **kidneys** revealed normal size and structure, corticomedullary definition and ratio for this age. The cortices presented largely uniform texture with normal echogenic relationship to liver and spleen. Medullary structure differed distinctly from the cortex and no evidence of pelvic dilation was present. The capsules were acceptably uniform without significant irregularities. Occasional cortical cyst was noted with slight areas of mineralization. The left kidney measured 5.07 cm. The right kidney measured 5.05 cm.

Adrenal Glands

Both **adrenal glands** were visualized and recognized as having normal shape, size, position and echogenicity for this breed. The phrenic vasculature, glandular echogenicity and detail were unremarkable. Capsule, cortex, and medullary definition were normal for this age patient. The left adrenal gland measured 2.04 x 0.54 cm at the cranial pole and 0.72 cm at the caudal pole. The right adrenal gland measured 0.6 cm.

Spleen

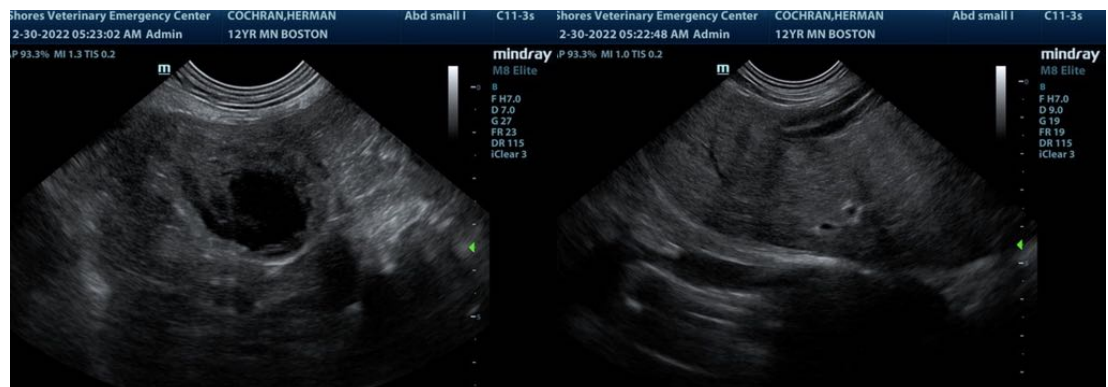
The **spleen** presented a smooth homogeneous parenchyma hyperechoic to liver and renal cortical parenchyma. The capsule was smooth without noticeable expansion or deviation from within the spleen or adjacent pathology. The splenic vasculature demonstrated normal volume without signs of congestion or thrombosis. No sonographic evidence of acute or chronic inflammatory, neoplastic, or infarctual changes was noted.

Liver

The **liver** was mildly enlarged with non-specific heterogeneous parenchymal changes. Increased portal markings were noted in the liver with occasional, hyperechoic nodular changes. The gallbladder was



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|---|--|
| PATIENT | mildly thickened with a minor excessive amount of debris. This is consistent with cholangitis, yet not to the level of mucocele formation. |
| Herman Cochran | |
| SPECIES | <i>Gastrointestinal</i> |
| Canine | There was some residual chyme and gas was noted in the stomach , yet not pathological. This is consistent with end post prandial presentation. Transit of chyme into the small intestine was normal. Curvilinear patterns were maintained throughout the GI tract. No evidence of pathology. Small and large intestine demonstrated normal luminal chyme and stool consistency respectively. No obstructive or overt infiltrative disease was noted. No associated abnormal lymphatic activity was noted. |
| BREED | |
| Boston Terrier | |
| SEX | <i>Pancreas</i> |
| Neutered male | The base and limbs of the pancreas were observed to be largely isoechoic to surrounding omental fat. Pancreatic duct and capsular contour were acceptably normal and parenchyma respected normal curvilinear patterns. No overt evidence of active inflammatory or neoplastic disease was noted. |
| AGE | |
| 12 years | |
| WEIGHT | ULTRASONOGRAPHIC FINDINGS |
| 10.6 kg | Non-specific inflammatory hepatopathy, cholangitis pattern with thickened gallbladder and debris. Minor retention of ingesta in the stomach. |
| INTERPRETED BY | <u>INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS</u> |
| Eric Lindquist, DMV DABVP, Cert. IVUSS | FNA of the liver is indicated as well as Leptospirosis titers. Ampicillin, Metronidazole and nutraceuticals are all indicated with supportive care. There is no evidence of neoplasia. Endoscopy would be ideal in this patient. GI protectant protocol is indicated. Recheck sonogram is recommended in 7-10 days or earlier if clinical signs worsen. Gastritis with potential microulcerative changes given the patient's history; however, no overt ulcers were noted. |
| IMAGING PERFORMED BY | |
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| HOSPITAL NAME | |
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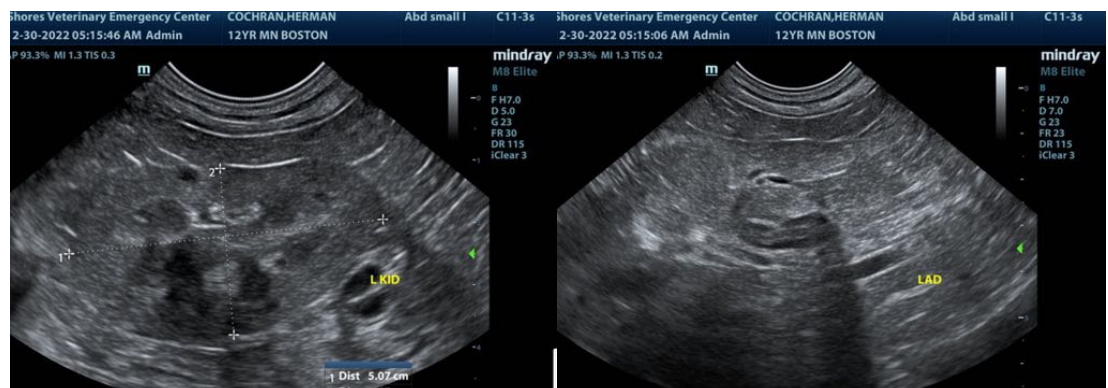
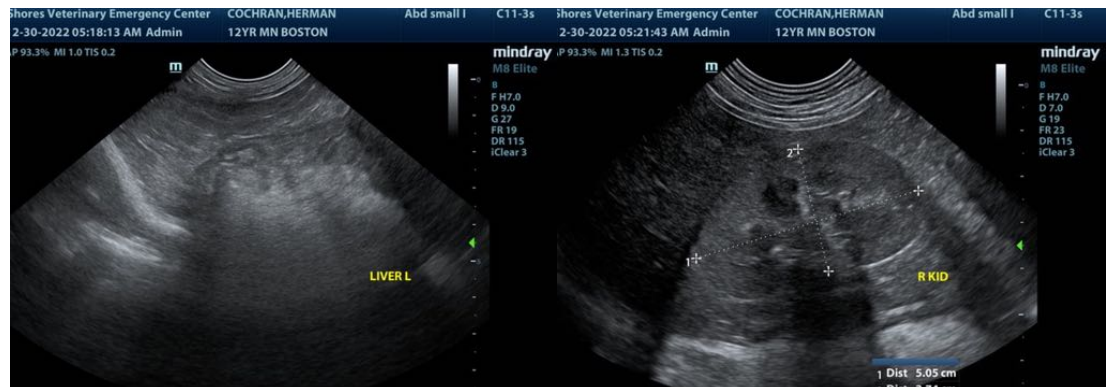
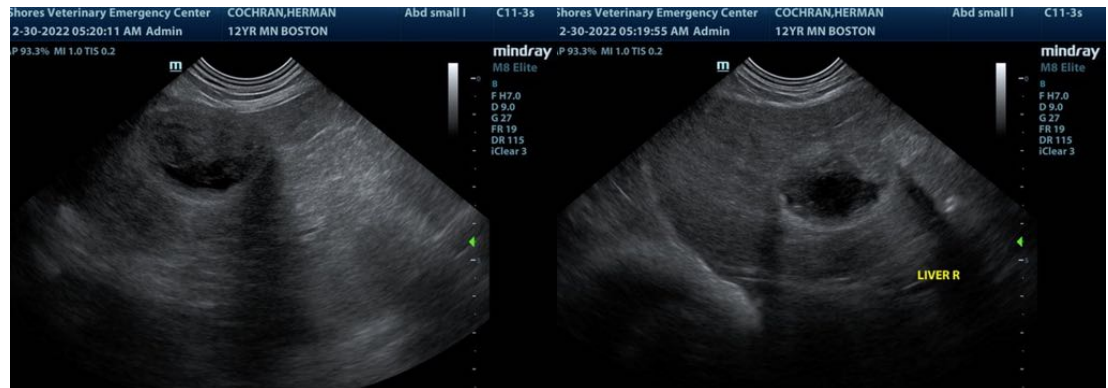
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

Eric Lindquist, DMV, DABVP, Cert. IVUSS, CEO of SonoPath.com
info@SonoPath.com