



PATIENT

Hope Doering

SPECIES

Canine

BREED

Border Collie

SEX

Spayed Female

AGE

13 Years

WEIGHT

62.2 Pounds

INTERPRETED BY

Eric Lindquist, DMV

DABVP, Cert. IVUSS

IMAGING PERFORMED BY

Dr. Schanche

HOSPITAL NAME

TotalBond VH

REFERRING VET

Dr. Schanche

INVOICE

41893

DATE

10/7/22

PRESENTING CLINICAL SIGNS

13 year old FS Border Collie presented for vomiting, diarrhea, lethargy. Addisonian - gets Zycortal every 27 days and 5 mg of Pred once per day. Over the weekend started to vomit - went to urgent vet on Sunday. Was treated with famotidine, cerenia, subcutaneous fluids. Came to us on Monday 10/3 - more lethargic, trouble walking described as doing acid walk, dripping from mouth, diarrhea and was given zycortal dose, sent home with oral cerenia, metronidazole, entyce. Next day a little better so all medication besides prednisone once per day stopped. Did great wed and thurs then into thurs night started to vomit again and vomited this am and wont eat and lethargic. BW on 10/3/22 - total proten 5.3, ALT 172, K 3.8, rest wnl, unremarkable cbc. Today after US starting IV fluids, oral cerenia, gave a 0.2 mg/kg pred equivalent dex SP injection and restarting metronidazole and entyce today. Hx of mild elevation in ALT 149 and ALP 169 on 7/2022 - has been normal previously

Abnormal PE/Chem/CBC/UA Results: BW on 10/3/22 - total proten 5.3, ALT 172, K 3.8, rest wnl, unremarkable cbc. Hx of mild elevation in ALT 149 and ALP 169 on 7/2022 - has been normal previously

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 were noted. Ureteral papillae were normal.

The **kidneys** revealed largely normal size and structure, corticomedullary definition and ratio (cortex 1/3 of medulla) were essentially maintained with some age-related loss of curvilinear patterns regarding the capsule and C/M junction. The cortices presented largely uniform texture with some increased echogenicity expected for his age patient. Medullary structure differed distinctly from that of the cortex and no evidence of pelvic dilation was present. The left kidney measured 5.8 cm.

Adrenal Glands

The region of the **left adrenal gland** was imaged yet given the Addisonian state it was not overtly visualized. No gross pathology in the region.

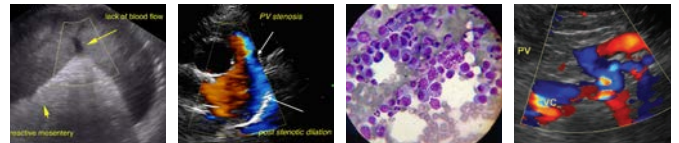
The region of the **right adrenal gland** was imaged, no overt pathology.

Spleen

The **spleen** was largely smooth with subtle heterogeneous parenchymal changes while maintaining normal echogenic relationship to the liver and kidney. These changes are consistent with normal age-related alteration. The capsule was smooth without noticeable impingement from within the spleen or from pathology in the adjacent abdomen. The splenic vasculature demonstrated normal volume without signs of congestion or significant contraction. No evidence of active acute or chronic inflammatory, neoplastic, or infarctual changes were noted.

Liver

The **liver** images submitted revealed subjectively normal liver size, contour, and structure. Parenchymal echogenicity was naturally coarse and hypoechoic to the spleen. Vascular and biliary tracts were of normal volume with no evidence of congestion. Gallbladder measured 3.0 cm x 1.5 cm. Normal teardrop appearance maintained, yet excessive debris present.



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Gastrointestinal

The **stomach** itself was unremarkable. The colonic wall was mildly thickened up to 0.28 cm. Echogenic submucosal layer. Submucosal layer was mildly thickened. Muscularis to mucosal ratio maintained. Some level of low-grade chronic inflammatory disease likely. Focal region of upper descending duodenum was particularly thickened with regional inflammation associated with the intestinal serosa. The submucosal layer was thickened and irregular. Neoplastic criteria not met. However, I cannot rule out an emerging neoplasia such as round cell neoplasia. Variable intestinal thickening noted elsewhere without acute inflammation.

Pancreas

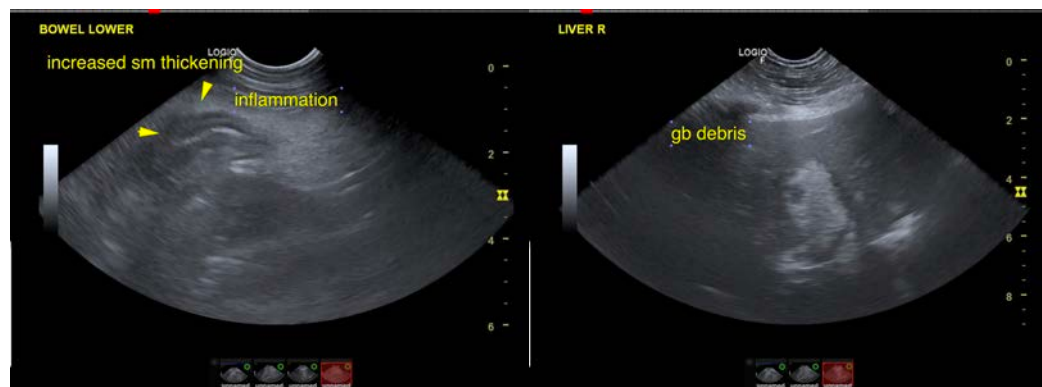
The base and limbs of the **pancreas** were observed to be largely isoechoic to surrounding omental fat. Pancreatic duct and capsular contour were acceptably normal and parenchyma respected normal curvilinear patterns. No overt evidence of active inflammatory or neoplastic disease was noted.

ULTRASONOGRAPHIC FINDINGS

- Acute on chronic inflammatory bowel with focal upper duodenal thickening and regional inflammation/peritonitis – Intestinal necrosis is a potential, bowel infarction less likely, acute on chronic inflammatory bowel most likely. Emerging round cell neoplasia cannot be completely ruled out.
- Likely reactive hepatopathy, given the minor ALT elevations. Hepatic reactivity to portal inflammation likely, given the duodenal pathology.
- Minor gallbladder debris

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

24-hour NPO, GI protectants, broad-spectrum antibiotics recommended. Subxiphoid palpation is recommended to gauge inflammation, as well as recheck sonogram in 48-72 hours, earlier if clinical decline is occurring. Otherwise, surgical exploratory would be warranted. However, it would be exceedingly difficult to resect this portion of the duodenum, given the presence of pancreatic ducts in the vicinity of the right pancreatic limb. However, full thickness biopsies could be obtained. Otherwise, endoscopy could be considered with mucosal biopsies of the upper duodenum. The pathology extends from 7-14 cm distal from the pyloric outflow. Good to guarded prognosis depending upon response to therapy.





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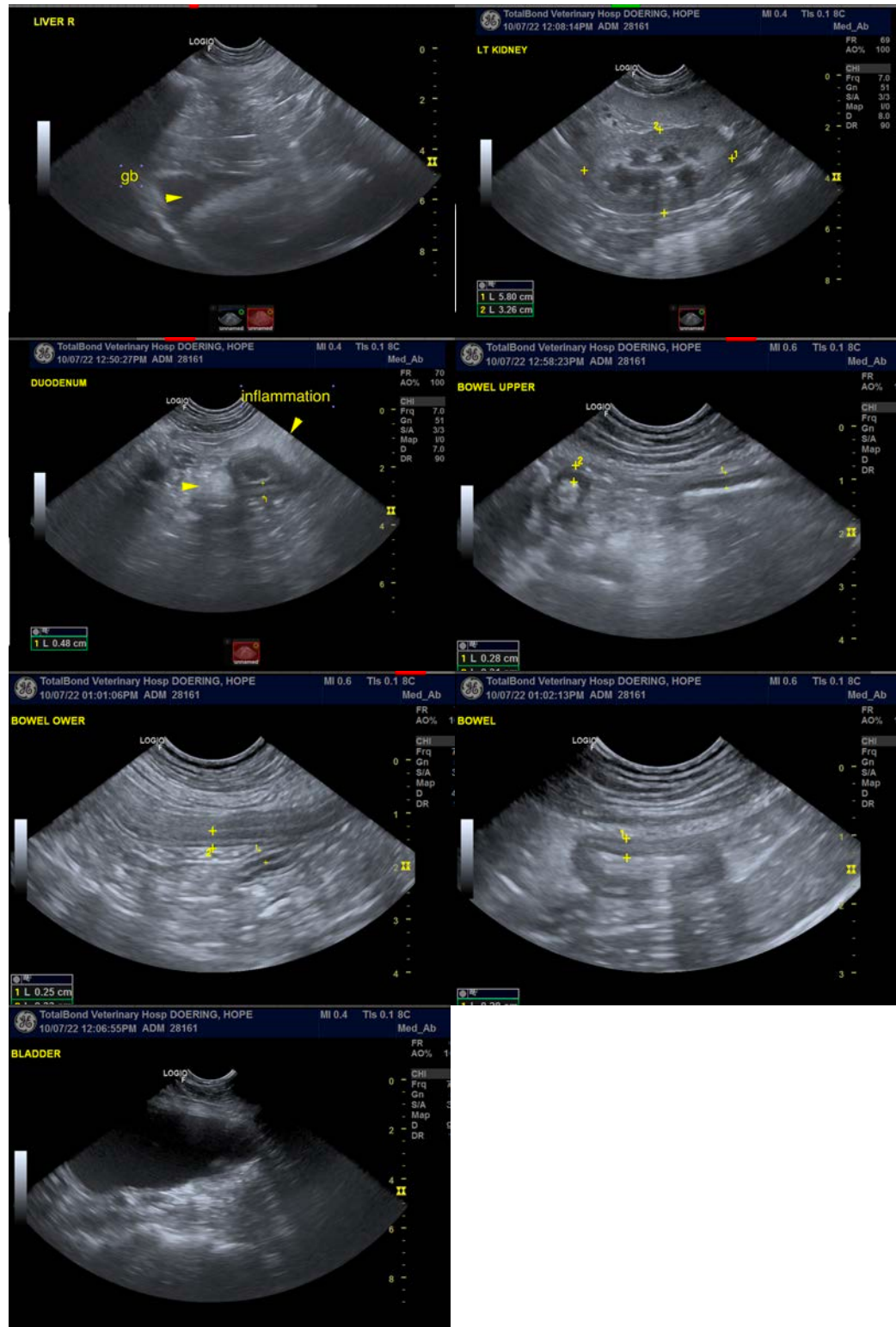
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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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

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