



**PATIENT**

Orwyn VanDerBerg

**SPECIES**

Canine

**BREED**

Border Collie Mix

**SEX**

Neutered male

**AGE**

3 years

**WEIGHT**

20 kg

**INTERPRETED BY**

Eric Lindquist, DMV  
DABVP, Cert. IVUSS

**IMAGING PERFORMED BY**

Dr. Stegemoller

**HOSPITAL NAME**

North Idaho AH

**REFERRING VET**

Dr. Morgan

**INVOICE**

40191

**DATE**

10/20/22

**PRESENTING CLINICAL SIGNS**

History: Presented 10/14/2022 for coughing and then developed diarrhea over the course of the last week. Owner reports very fast panting. No vomiting, has always urinated a little more than the other dog in the home. Not current on vaccinations. Normal appetite. Presented on 10/20/2022 for further work up. Owner reports breathing has become very labored, continuing to have diarrhea, attitude is a little lethargic/depressed, but feeling better the last 3 days and worse today.

Abnormal PE/Chem/CBC/UA Results: Exam 10/14 - very underweight, severe muscle loss. Bright, alert, and responsive attitude, constantly panting. Not coughing at time of exam. CBC - WBC 17,450, Neu 14,030, Mono 1770. Started on 3 day treatment of fenbendazole, metronidazole, and proviable. Concerned for possible malabsorptive disease. 10/20/2022 - Severe tachycardia, tachypnea, and abdominal respiratory effort. Mucoid yellow diarrhea. Recheck CBC - RBC 4.3, HCT 28.9%, WBC 11.96k, Lym 0.91k, Neu 9.83k, Mono 1.1k, Plt 159. 4DX negative. FNA of spleen, mass near adrenal gland, UA pending. Thoracic radiographs show severe pleural effusion, performed thoracocentesis and removed 1300ml - modified transudate suspected, cytology pending. After thoracocentesis, slight pulmonary edema also noted and then administered furosemide.

**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 moderate changes and bilateral pyelectasia. Echogenic debris was noted within the renal pelvises. Dorsal cortical collapse in the right kidney. The right kidney measured 7.8 cm. The left kidney measured 5.6 cm.

**Adrenal Glands**

A mass was noted near the left adrenal gland. It appears to be deriving from the caudal pole of the left adrenal gland with pericapsular inflammation. The mass measures 3.2 x 1.6 cm, but does not appear invasive. The left adrenal gland was enlarged, irregular and expansive. The left adrenal gland measured 2.2 x 0.52 cm at the cranial pole and 0.47 cm at the caudal pole. The right adrenal gland measured 2.1 x 0.78 cm at the cranial pole and 0.7 cm at the caudal pole.

**Spleen**

The **spleen** revealed multi-focal, hypoechoic, subtle nodular changes. The larger nodule at the cranial pole of the spleen measured 1.2 cm.

**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. The gallbladder presented acceptably thin walls with



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primarily anechoic content. The cystic and common bile ducts were normal. No pathological hepatic lymphadenopathy was evident. No overt structural evidence of inflammatory, infiltrative or regenerative pathology was evident. Pleural effusion was noted through the diaphragm.

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**Gastrointestinal**

Examination of the **gastrointestinal tract** revealed a stomach and intestine free of stasis, of normal wall thickness, acceptable curvilinear mural detail, and peristaltic activity. 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.

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**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.

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**ULTRASONOGRAPHIC FINDINGS**

**WEIGHT**

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Mass appeared to be attached to the left adrenal gland.

Undefined splenic nodular changes.

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**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

If the sonographer is comfortable with the procedure FNA of the mass adjacent to the left adrenal gland is warranted. It is important to avoid the left renal artery. FNA of the splenic nodule is warranted along with pleurocentesis and cytospin to assess the thoracic fluid. Multi-centric neoplastic process is suspected. Chest CT is recommended after chest drainage is indicated. The prognosis is guarded to poor. Pheochromocytoma is a strong potential in this case. Adenocarcinoma and round cell neoplasia is possible.

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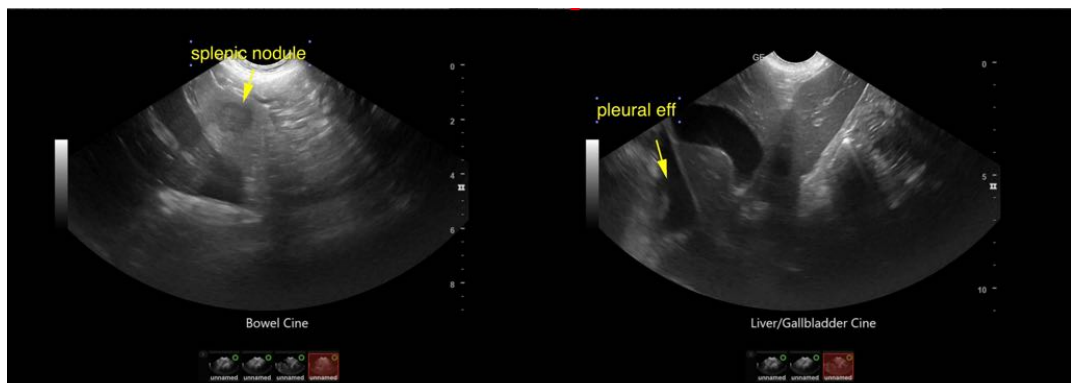
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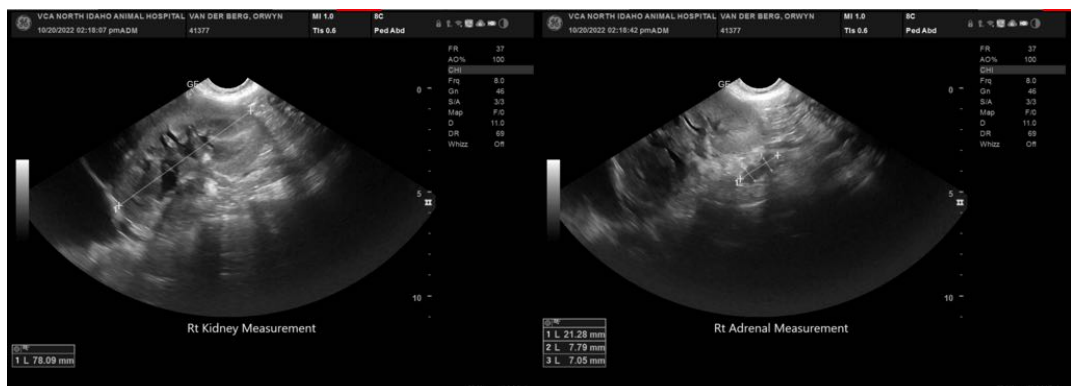
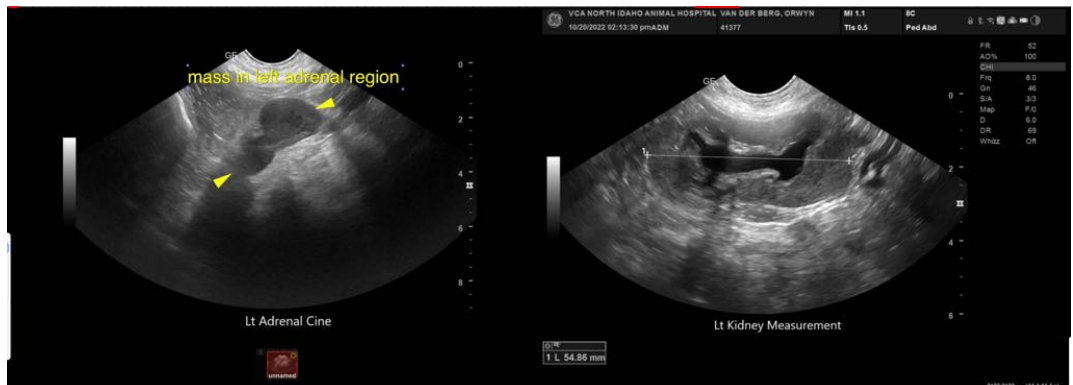
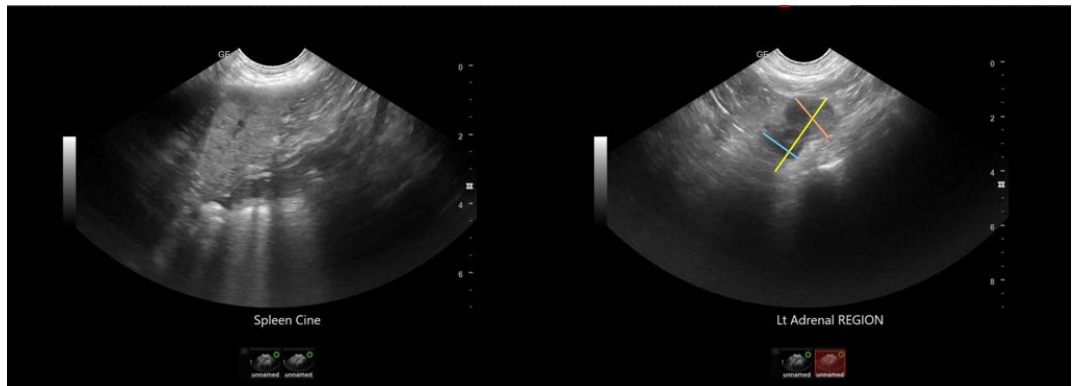
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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