



PATIENT

Bella Brownfield

SPECIES

Canine

BREED

German Shepherd

SEX

Spayed Female

AGE

10.5.2012

WEIGHT

26.3 kg

INTERPRETED BY

Andrea Nicastro,
DVM, Diplomate ACVIM
(Small Animal Internal
Medicine)

IMAGING PERFORMED BY

Andrea Nicastro,
DVM, Diplomate ACVIM
(Small Animal Internal
Medicine)

HOSPITAL NAME

Bluepearl Spec &
Emerg Summerville

REFERRING VET

Esther Schow, DVM

INVOICE

11762

DATE

10.3.2022

PRESENTING CLINICAL SIGNS

Bella is a 10yo Female Spayed German Shepherd presenting to emergency services for vomiting and lethargy. Two-week history of vomiting about once a day. O states that most of the days Bella would eat the vomitus shortly after but usually has been food. Bella stopped eating dry food about two weeks ago and owner started giving canned food, then chicken/rice to help with vomiting. O reports having normal BM but has not had any in past two days. She has progressed into becoming lethargic, moving up stairs slower and drinking more. O brought into Flowertown Animal hospital for BW and radiographs. BW showed low potassium. No prior health history, UTD on vaccines but not on preventions. MM/CRT: Pink, tacky, CRT < 2 sec Hydration: Dehydrated Attitude: QAR Weight: 26.3 kg Pain score: 1/4 BCS: 5/9 Eyes: No ocular discharge, eyes clear OU Ears: Clean AU Oral: Moderate dental tartar/gingivitis. No oral lesions noted Integumentary: Clean haircoat. No external wounds or ectoparasites noted Musculoskeletal: Ambulatory/weight bearing all limbs Circulatory: No murmurs/arrhythmias, pulses strong/synchronous Respiratory: Lungs clear bilaterally Digestive: Abdomen soft/nonpainful, no palpable masses or abnormalities Rectal Exam: UTO Genitourinary: Normal externally Neural System: Normal cursory neuro exam; no ataxia noted, cranial and spinal nerves intact, normal mentation Lymph Nodes: Normal peripherally

Abnormal labwork values: CHEM (obtained at rDVM): decreased Cl (97), decreased K (2.7), decreased Na (137)

Current Medications: Cerenia 1mg/kg, 1mg/kg

Radiographic Findings: 3 view thoracic and abdominal radiographs: Findings: Seven radiographs of the thorax and abdomen are available for review. Thorax: The cardiac silhouette is decreased in size and the thoracic vessels are smaller. Intracardiac and cardiothoracic ratios are normal, failing to demonstrate evidence of individual chamber enlargement or pericardial disease. The lungs are clear. There is no evidence of pulmonary nodules or masses, lobar consolidation, enlargement of the esophagus, pleural effusion or intrathoracic lymph node enlargement. There is a moderate amount of ventral spondylosis in the thoracic spine. Abdomen: Serosal detail is normal. There are no specific abnormalities identified at the regions of the liver, spleen, kidneys or urinary bladder. There is a moderate amount of gas within the gastrointestinal tract. The gastrointestinal tract has normal size and distribution, but several loops demonstrate a corrugated appearance. There is a moderate amount of ventral spondylosis in the lumbar spine. Assessment: 1-The appearance of the bowel is most consistent with enteritis/gastroenteritis. Differentials to consider include gastritis/esophagitis, pancreatitis, enteritis (which could be viral, bacterial, dietary, toxic or parasitic), or due to the path of irritating or partially obstructive foreign body. Consider: 1. cPLI testing. 2. Ultrasound examination +/- contrast upper gastrointestinal series might be considered, especially if the clinical signs persist or progress. 2-the appearance of the thorax is most likely consistent with hypovolemic shock; this is most likely secondary to dehydration or hemorrhages.

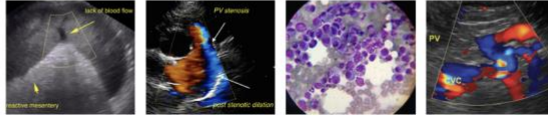
ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The **urinary bladder** is pelvically located. The wall is normal in thickness and the mucosal surface is smooth. The bladder lumen is mildly distended with anechoic urine. No masses, inflammatory changes or calculi are observed. The region of the trigone is normal.

The **left kidney** is normal size (7.43 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with mild loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydronephrosis. Renal vasculature is normal.

The **right kidney** is normal size (7.86 cm in length); normal shape and architecture with smooth



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Bella Brownfield

peripheral margins. There is a normal 1:3 cortex to medulla ratio with mild loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydronephrosis. Renal vasculature is normal.

SPECIES

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Adrenal Glands

The **left adrenal gland** is normal size (0.86 cm at cranial pole) (0.52 cm at caudal pole); with a slightly irregular shape. A 0.84 x 0.84 cm irregular hyperechoic nodule is observed at the cranial pole. Glandular echogenicity and detail at the caudal pole are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

BREED

German Shepherd

The **right adrenal gland** is prominent in size (1.40 cm at cranial pole) (0.57 cm at caudal pole); with a slightly irregular shape. A 2.86 x 1.51 cm hyperechoic nodule/mass is observed at the cranial- to mid-aspect. Glandular echogenicity and detail at the caudal aspect are normal. Surrounding vasculature appears normal.

SEX

Spayed Female

Spleen

The **spleen** is normal in size (1.71 cm in width at the level of the hilus) with a normal capsular contour. There is appropriate echogenicity and echotexture. No focal lesions are observed. Splenic vasculature is normal.

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Liver

The **liver** is subjectively normal in size with normal contours and structure. There is appropriate echogenicity and echotexture. No overt structural evidence of inflammatory, infiltrative, or regenerative pathology is evident. Vascular and biliary tracts are of normal volume with no evidence of congestion. No pathological hepatic lymphadenopathy observed.

WEIGHT

26.3 kg

The **gall bladder** is distended. The wall is normal in thickness. A large amount of aggregated, echogenic suspended sludge, in a stellate pattern is observed within the lumen. The cystic and common bile ducts are normal/not seen.

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Gastrointestinal

The **gastric lumen** is mildly to moderately distended with slightly echogenic fluid. The gastric wall is diffusely thickened (up to 2.29 cm) and irregular, with a loss of the normal layering pattern. The pyloric outflow tract appears patent. The small intestinal lumen is segmentally fluid-distended (mild). The small intestinal wall is normal in thickness with a normal layering pattern and appropriate mural detail. The colonic wall is normal. There is no obvious evidence of an obstructive pattern.

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Pancreas

The left limb is visible/prominent with minimal deviation from the normal peripheral contours. The parenchyma is mildly hypoechoic relative to surrounding omental fat. No focal lesions are observed. The pancreatic duct is not overtly dilated.

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Free Abdomen

There is no obvious evidence of free fluid. Several **lymph nodes** at the cranial aspect are enlarged (up to 3.94 cm), rounded and hypoechoic. Surrounding mesentery is hyperechoic.

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Other

A **brief echocardiogram** reveals no evidence of pericardial effusion or obvious right atrial/auricular mass.

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ULTRASONOGRAPHIC FINDINGS

Primary Findings

- The severe gastric wall thickening is more concerning for infiltrative neoplasia (i.e., lymphoma, adenocarcinoma). However, a severe inflammatory process cannot be completely excluded.
- The cranial abdominal lymphadenopathy is also concerning for Infiltrative neoplasia. Other differentials include lymphadenitis or lymphoid hyperplasia.
- The gall bladder changes are consistent with a mucocele.
- The pancreatic changes in the left limb are suggestive of mild pancreatitis.

Secondary Findings

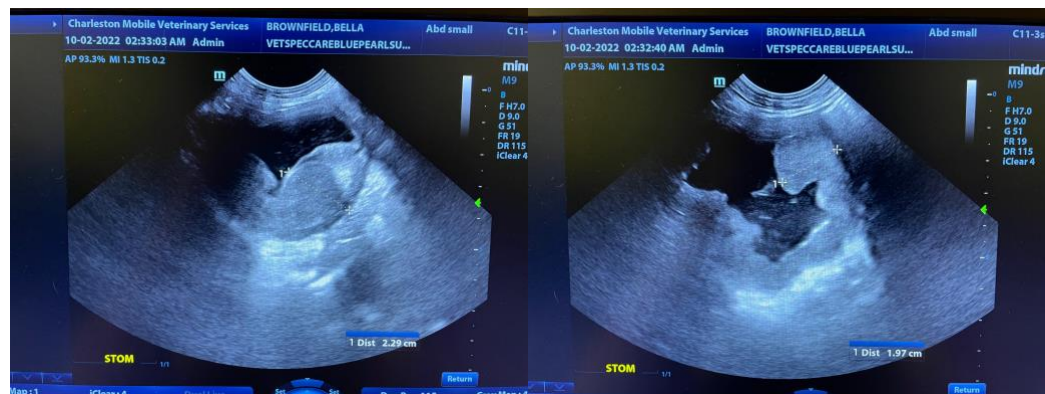
- Mild, bilateral chronic renal changes.
- The bilateral adrenal nodules trend toward the benign (i.e., benign nodular hyperplasia). However, an emerging tumor cannot be completely excluded.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Three-view thoracic radiographs are recommended to assess for pulmonary metastases.

Fine-needle aspirates of the gastric wall and cranial abdominal lymph nodes can be considered, if clotting status is appropriate. Twenty-five gauge-needles should be used. If cytology results are inconclusive, surgical biopsy may be necessary to get a definitive diagnosis.

Given the gallbladder changes, consider initiation of Ursodiol therapy with serial sonographic monitoring (i.e, every 4-6 weeks) to assess for progression. If surgery is ultimately pursued for biopsies, a cholecystectomy should be considered.





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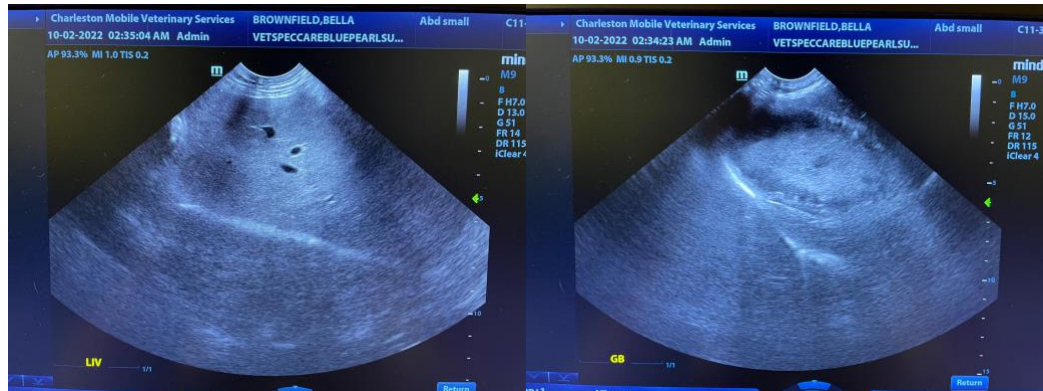
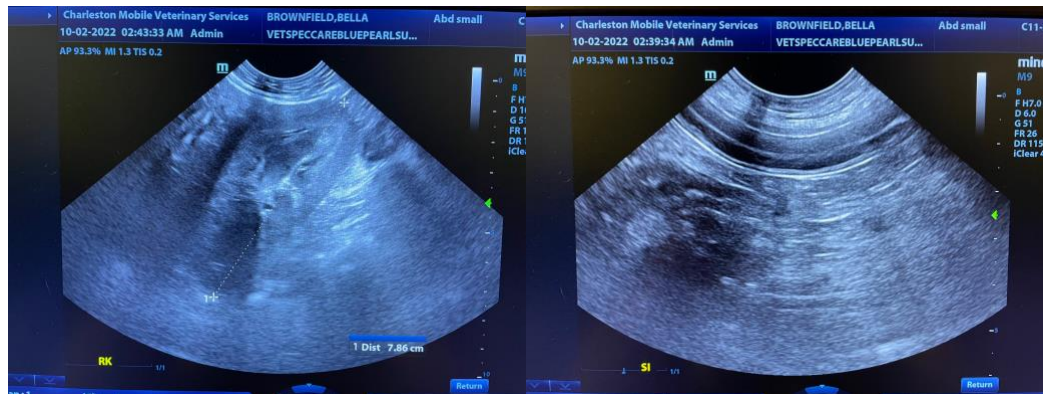
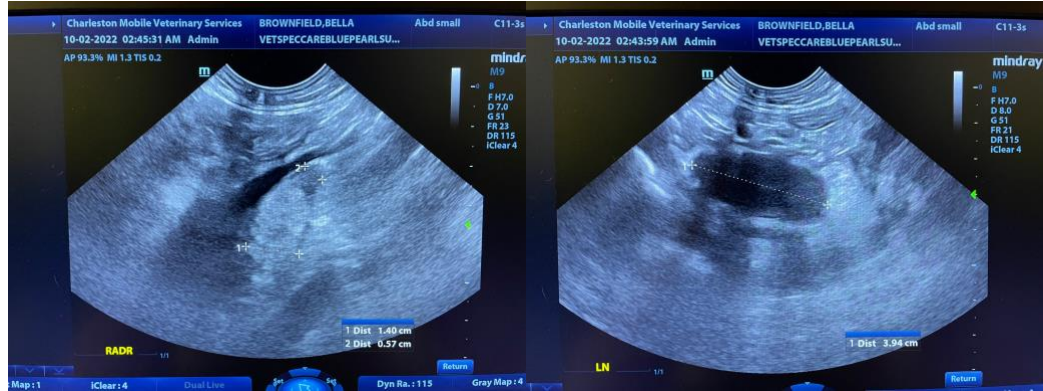
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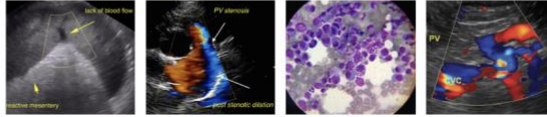
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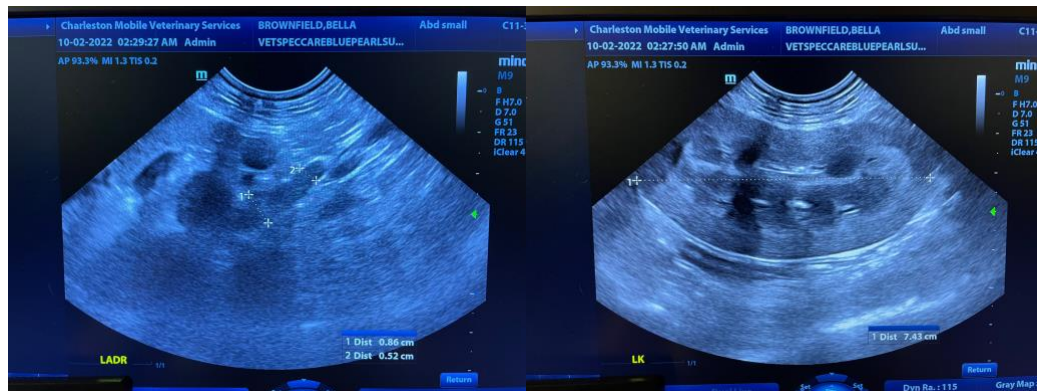
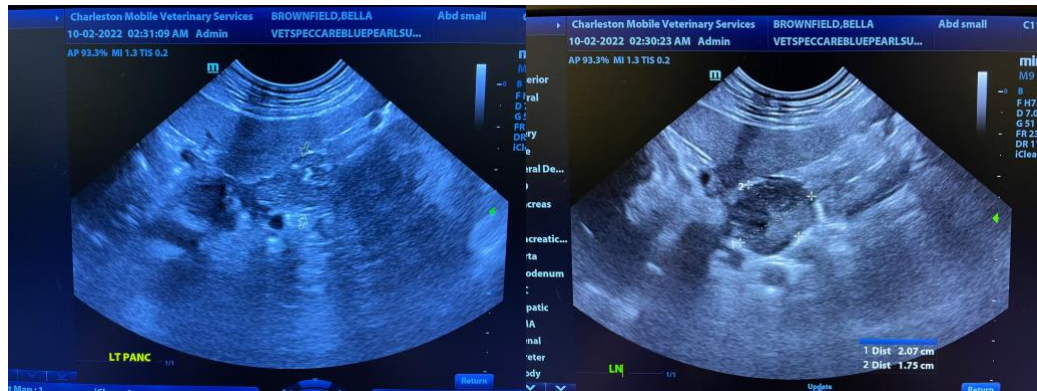
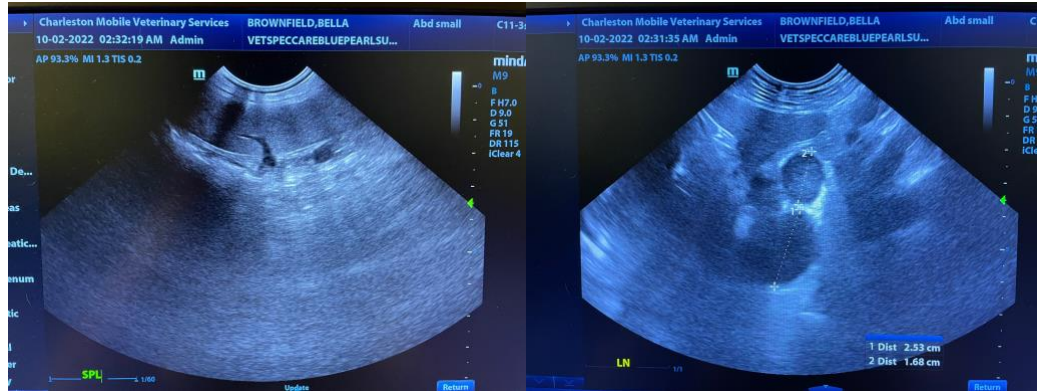
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

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