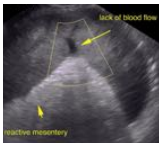
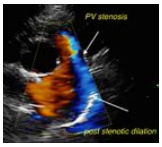
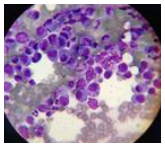
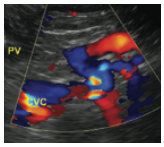
SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™






SonoPath.com
1-800-838-4268 info@sonopath.com

**PATIENT**

Bella Iverson

**SPECIES**

Canine

**BREED**

Chugg

**SEX**

Spayed female

**AGE**

10 years

**WEIGHT**

4 kg

**INTERPRETED BY**

Eric Lindquist, DMV DABVP, Cert. IVUSS

**IMAGING PERFORMED BY**

Dr. Gardner

**HOSPITAL NAME**

Wilvet Salem

**REFERRING VET**

Dr. Gardner

**INVOICE**

31763

**DATE**

7/18/22

## PRESENTING CLINICAL SIGNS

Brief History: Presented 7/17 night for vomiting starting 7/16 progressing to dark diarrhea with hematochezia
Abnormal PE/Chem/CBC/UA Results: QAR. MM pink, moist, CRT < 2 seconds. No peripheral lymphadenopathy. Normal bronchovesicular sounds bilaterally with no crackles or wheezes. No murmur or arrythmia. Abdomen soft and nonpainful with a medium sized bladder, no overt masses or organomegaly. Femoral pulses strong and synchronous. Ambulatory x 4.CBC: HCT 58.8 WBC 10.30 Chem 17: Tbili 1.4 -- first sample was hemolyized EPOC: HCT 58 Gluc 132 Lact 3.33

## ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

### *Urinary System*

The **urinary bladder** and visible pelvic urethra were unremarkable for the level of repletion presented. The urine, however, did present some mildly echogenic debris consistent with mucous, exfoliated cells from renal or bladder origin, and/or blood clots as these echogenic changes can all present similarly. Bladder sand was noted and measured 1.5 cm. This is often related to urinary tract infection but may represent simple evidence of exfoliated debris or sterile inflammation. Cystocentesis, urinalysis, +/- culture would be recommended to rule out and define any UTI.

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. The left kidney measured 3.0 cm. The right kidney measured 3.0 cm.

### *Adrenal Glands*

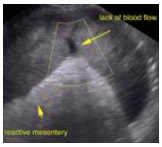
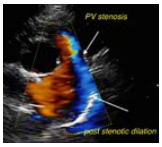
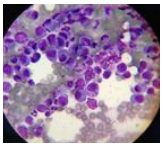
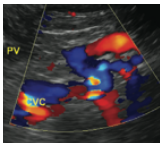
Both **adrenal glands** were visualized and recognized as having normal shape, size, position and echogenicity for this breed. The phrenic vasculature, glandular echogenicity and detail were unremarkable. Capsule, cortex, and medullary definition were normal for this age patient. The left adrenal gland measured 0.4 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** 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 primarily anechoic content. The cystic and common bile ducts were normal. No pathological hepatic

SonoPath.com
1-800-838-4268 info@sonopath.com

**PATIENT**

Bella Iverson

**SPECIES**

Canine

**BREED**

Chugg

**SEX**

Spayed female

**AGE**

10 years

**WEIGHT**

4 kg

**INTERPRETED BY**

Eric Lindquist, DMV DABVP, Cert. IVUSS

**IMAGING PERFORMED BY**

Dr. Gardner

**HOSPITAL NAME**

Wilvet Salem

**REFERRING VET**

Dr. Gardner

**INVOICE**

31763

**DATE**

7/18/22

lymphadenopathy was evident. No overt structural evidence of inflammatory, infiltrative or regenerative pathology was evident.

### *Gastrointestinal*

The **stomach** presented concentric mural thickening. The layering was maintained, yet the mucosa was prominent and thickened.

### *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

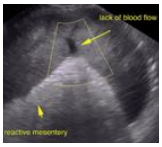
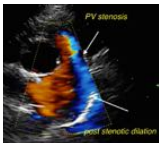
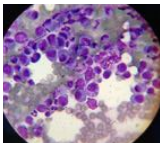
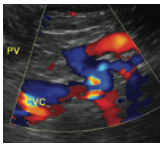
Gastritis and colitis presentation.

## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

There was no overt neoplastic criteria. GI supportive protocol is recommended. Parasitic disease and enterotoxins are all possible. Recheck sonogram is recommended in 3-5 days to ensure adequate resolution. Bladder sand and full urinary work-up is warranted. There is a potential for emerging GI neoplasia. This patient should be monitored carefully. Anti-parasitic protocol and a clinical trial of the following may prove effective.

**Helicobacter/Gastritis protocol**
A clinical trial of **Zithromax (*Dogs:*** 5-10 mg/kg p.o. q24h. May increase dosing interval to q48h after 3-5 days of treatment)**, Metronidazole** (10-20 mg/kg p.o. b.i.d.), **Pepcid** (0.5-1 mg/kg s.i.d.) and **Sucralfate** (0.5-2 g/dog PO) or **Omeprazole** (1 mg/kg p.o. s.i.d.) over the next 3 weeks along with a **novel-protein or hydrolyzed diet** with slurry feeding b.i.d./t.i.d. over the next 2-4 days and then increase to canned diet bid. Dry food should be avoided over the next 4 weeks. A recheck sonogram to assess GI improvement or progression would be ideal in 4 weeks.

SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™

SonoPath.com
1-800-838-4268 info@sonopath.com

**PATIENT**

Bella Iverson

**SPECIES**

Canine

**BREED**

Chugg

**SEX**

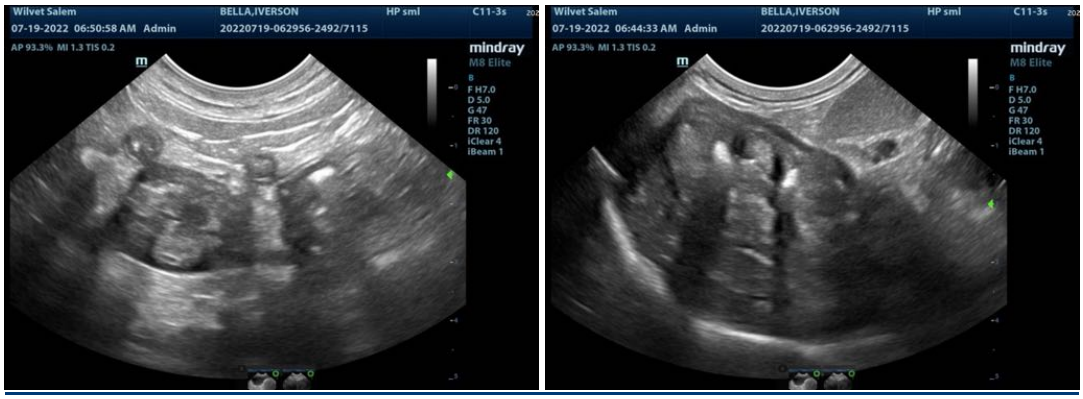
Spayed female

**AGE**

10 years

**WEIGHT**

4 kg





**INTERPRETED BY**

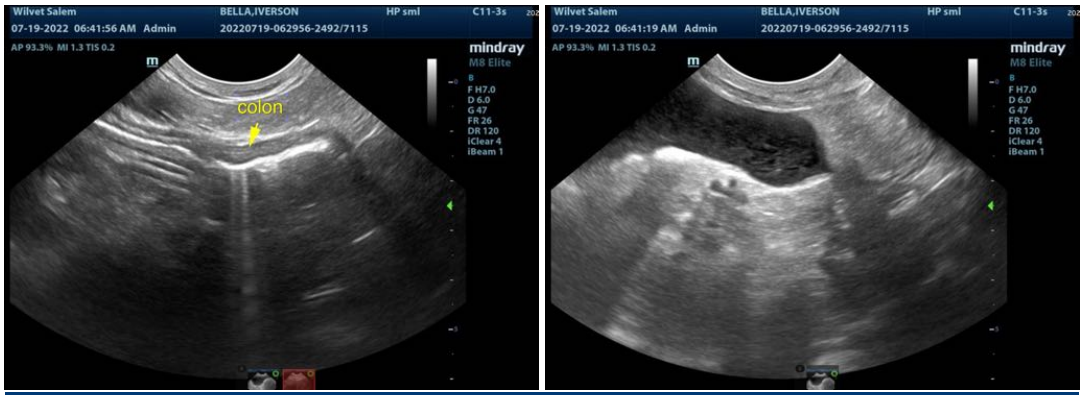
Eric Lindquist, DMV DABVP, Cert. IVUSS

**IMAGING PERFORMED BY**

Dr. Gardner

**HOSPITAL NAME**

Wilvet Salem




**REFERRING VET**

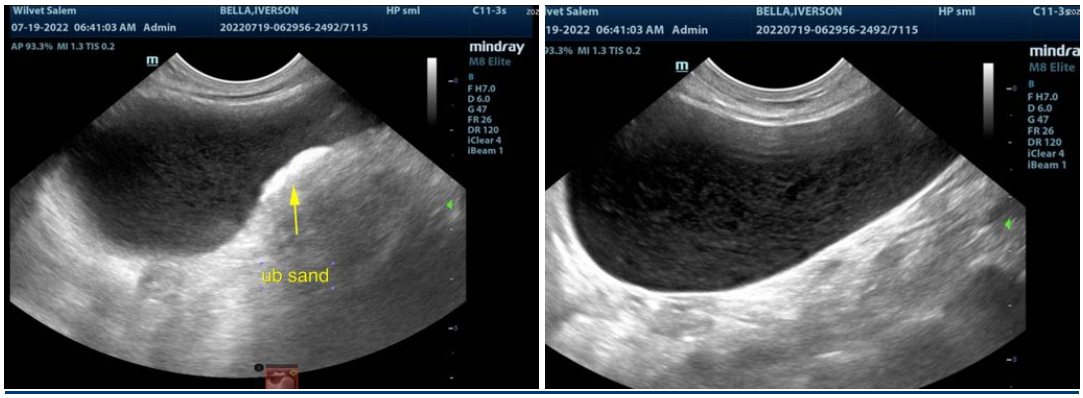
Dr. Gardner

**INVOICE**

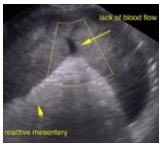
31763

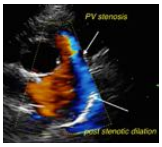
**DATE**

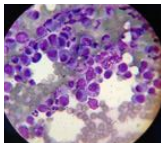
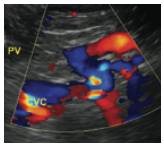
7/18/22



SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™






SonoPath.com
1-800-838-4268 info@sonopath.com

**PATIENT**

Bella Iverson

**SPECIES**

Canine

**BREED**

Chugg

**SEX**

Spayed female

**AGE**

10 years

**WEIGHT**

4 kg

**INTERPRETED BY**

Eric Lindquist, DMV
DABVP, Cert. IVUSS

**IMAGING PERFORMED BY**

Dr. Gardner

**HOSPITAL NAME**

Wilvet Salem

**REFERRING VET**

Dr. Gardner

**INVOICE**

31763

**DATE**

7/18/22

**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