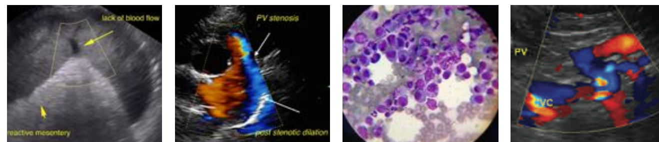


SonoPath.com
1-800-838-4268 info@sonopath.com

**PATIENT**

Bella Kuzel

**SPECIES**

Canine

**BREED**

Beagle

**SEX**

Spayed Female

**AGE**

16 years

**WEIGHT**

23 lbs

**INTERPRETED BY**

Beth Johnson, DVM
DACVIM

**IMAGING PERFORMED BY**

Shari Reffi CVT

**HOSPITAL NAME**

Newton VH

**REFERRING VET**

Dr. Chabora

**INVOICE**

30977

**DATE**

6/13/22

## PRESENTING CLINICAL SIGNS

History: Vomiting, lethargic. Current meds: Cerenia, Buprenex, KCL additive, normally on Carprofen and Gabapentin for back issues.
Abnormal PE/Chem/CBC/UA Results: Chol 318, Glucose 145, ALP 309, K+ 3.7, Phos 5.7, Cl 100, CPL abnormal.

## ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

### *Urinary System*

Urinary bladder is moderately distended with anechoic contents. It has normal uniform wall thickness (< 0.2 cm). No masses or cystoliths are observed.

Left kidney is normal in size and shape with smooth peripheral margination. A normal 1:3 cortex to medulla ratio is maintained. The medulla and cortices are uniform in texture with some mild increased echogenicity and mild loss of corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed. The left kidney measured 5.1 cm.

Right kidney is normal in size and shape with smooth peripheral margination. A normal 1:3 cortex to medulla ratio is maintained. The medulla and cortices are uniform in texture with some mild increased echogenicity and mild loss of corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed. The right kidney measured 5.54 cm.

### *Adrenal Glands*

Left adrenal gland is normal in size (2.11 cm long, 0.79 cm at cranial pole and 0.74 cm at caudal pole), and shape. The left adrenal gland had a slightly heterogenous echotexture, but no capsular expansion and no vascular invasion, etc. This is considered a normal aging change.

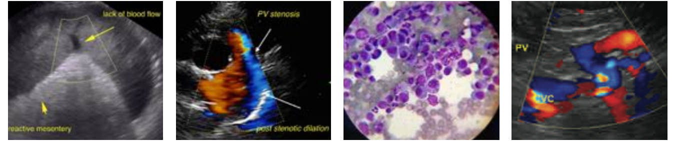
Right adrenal gland is normal in size (2.16 cm long, 0.68 cm at cranial pole and 0.76 cm at caudal pole), shape and contour. Corticomedullary structure is unremarkable.

### *Spleen*

Spleen is subjectively normal in size with normal smooth margins. Parenchyma is normal in echogenicity and echotexture. No focal nodules or masses are observed. Splenic vasculature appears normal.

### *Liver*

Liver is subjectively enlarged with rounded margins. Parenchyma is heterogenous characterized by multiple poorly defined hypoechoic nodules within otherwise hyperechoic liver parenchyma. Visible vasculature appears normal. A 2.0 x 3.0 cm slightly, hypoechoic heterogenous nodule/mass is present in the mid ventral liver. GB is moderately distended with anechoic bile and gravity dependent echogenic sediment. The wall is smooth without visible thickening. There is no evidence of cystic or CBD dilation. There is no evidence of effusion or inflammation.





**PATIENT**

Bella Kuzel

**SPECIES**

Canine

**BREED**

Beagle

**SEX**

Spayed Female

**AGE**

16 years

**WEIGHT**

23 lbs

**INTERPRETED BY**

Beth Johnson, DVM
DACVIM

**IMAGING PERFORMED BY**

Shari Reffi CVT

**HOSPITAL NAME**

Newton VH

**REFERRING VET**

Dr. Chabora

**INVOICE**

30977

**DATE**

6/13/22

### *Gastrointestinal*

Fundic mucosal hypertrophy with hyperechoic mucosa and some mucosal remodeling is noted. There is no loss of mural detail. Layering is normal. There is mild luminal fluid accumulation. No evidence of masses/nodules or foreign material present.

The small intestines are normal in wall thickness and layering. Small intestinal motility appears adequate (1-3 contractions per min). There are no luminal contents noted within small intestines.

Colon is normal in wall thickness (< 0.2 cm) and layering.

### *Pancreas*

Pancreas has normal homogenous echotexture and is normal in echogenicity and smooth margination. There is no evidence of peripancreatic inflammation.

### *Free Abdomen*

Lymph nodes are normal with no observed enlargement. No visible free fluid including pericardial effusion was noted.

## ULTRASONOGRAPHIC FINDINGS

**PRIMARY FINDINGS:**

Gastritis – Microulceration cannot be ruled out.

Heterogenous liver with a hypoechoic nodule. Differential include benign nodular hyperplasia versus primary, well-differentiated infiltrative neoplasia such as a hepatocellular carcinoma versus other.

**SECONDARY FINDINGS:**

Age related kidney change – This finding is expected/consistent with age-related mild degenerative disease and should be interpreted clinically in combination with laboratory changes.

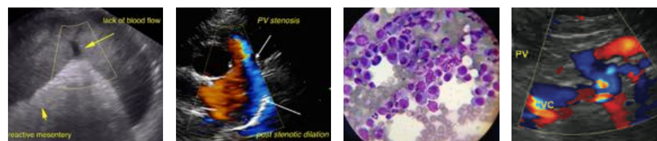
Gallbladder debris - Cholecystic debris is of unknown clinical significance. It can be seen with biliary stasis from fasting or illness. Cholecystic debris is not necessarily related to hepatobiliary disease. Echogenic bile is most commonly an incidental finding in dogs and should be interpreted in combination with clinical signs such as nausea, inappetence, cranial abdominal discomfort and/or laboratory changes such as increased ALP and/or increased Tbili.

Mildly heterogenous left adrenal gland. Considered an age related change.

## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

I recommend:

1. FNA of the liver nodule if the patient’s coagulation status is appropriate. This finding is likely incidental and not related to the gastrointestinal signs; however, could be infiltrative neoplasia




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

**PATIENT**

Bella Kuzel

**SPECIES**

Canine

**BREED**

Beagle

**SEX**

Spayed Female

**AGE**

16 years

**WEIGHT**

23 lbs

**INTERPRETED BY**

Beth Johnson, DVM
DACVIM

**IMAGING PERFORMED BY**

Shari Reffi CVT

**HOSPITAL NAME**

Newton VH

**REFERRING VET**

Dr. Chabora

**INVOICE**

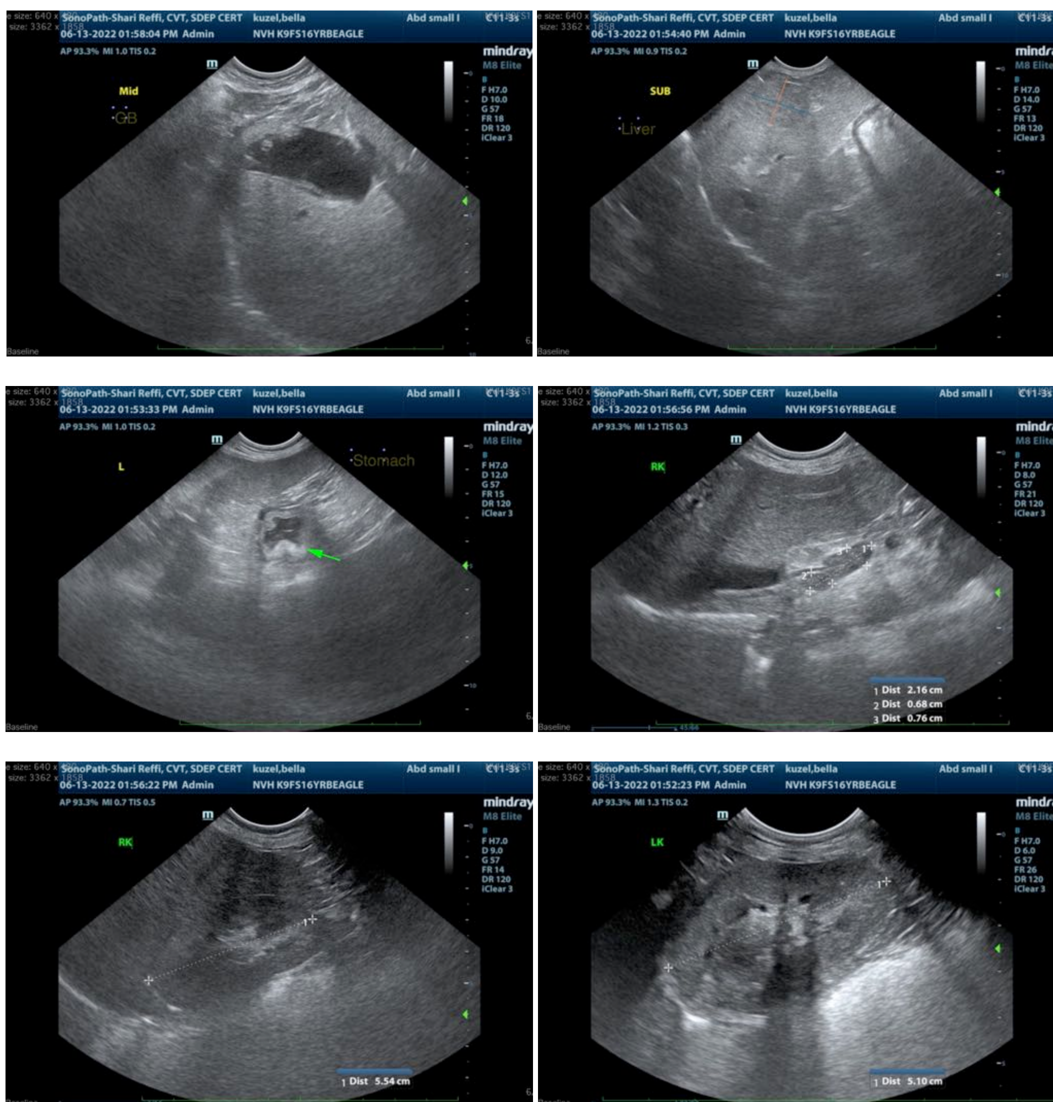
30977

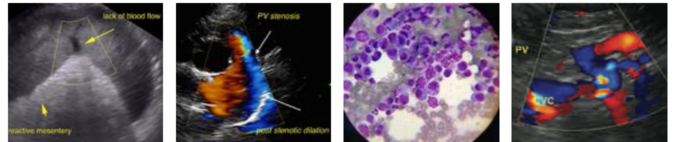
**DATE**

6/13/22

and cytology is recommended.

2. Both gastrointestinal disease and pancreatitis can be present with minimal ultrasonographic changes. Therefore, gastrointestinal panel including TLI, PLI, folate and cobalamin is recommended if not already evaluated for further evaluation of gastrointestinal and pancreatic function.
3. In the meantime, medical management for gastritis/gastroenteritis with antiemetics, gastroprotectants, appetite stimulants if needed, etc. is recommended as supportive care with monitoring for progression or improvement of clinical signs.






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

**PATIENT**

Bella Kuzel

**SPECIES**

Canine

**BREED**

Beagle

**SEX**

Spayed Female

**AGE**

16 years

**WEIGHT**

23 lbs

**INTERPRETED BY**

Beth Johnson, DVM DACVIM

**IMAGING PERFORMED BY**

Shari Reffi CVT

**HOSPITAL NAME**

Newton VH

**REFERRING VET**

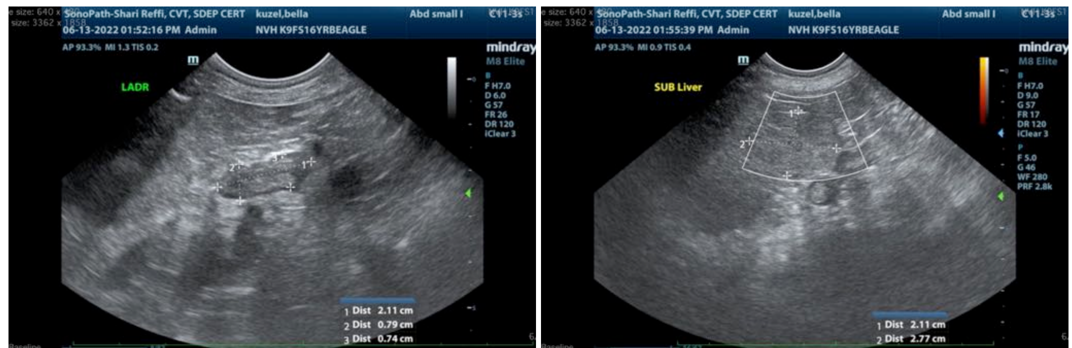
Dr. Chabora

**INVOICE**

30977

**DATE**

6/13/22




**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.

**Beth Johnson, DVM DACVIM**

Beth.Johnson@SonoPath.com