



**PATIENT**

Alulu Bruinooge

**PRESENTING CLINICAL SIGNS**

Collapsing episodes, weight loss. No current meds.  
Abnormal PE/Chem/CBC/UA Results: HCT 33%, SGOT 409, SGPT 5,211, SAP 1,008, PSL 212.

**SPECIES**

Canine

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**Urinary System**

**BREED**

Mix

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

**SEX**

Intact male

Left kidney is normal in size (5.55 cm), shape and echogenicity. It has smooth peripheral margination and appropriate corticomedullary distinction. There is no pyelectasia noted. No mineral is observed.

Right kidney is normal in size (6.18 cm), shape and echogenicity. It has smooth peripheral margination and appropriate corticomedullary distinction. There is no pyelectasia noted. No mineral is observed.

**AGE**

14 years

**Adrenal Glands**

**WEIGHT**

38.5 lbs

Left adrenal gland is normal in size (2.16 cm long, 0.6 cm at cranial pole and 0.63 cm at caudal pole), shape and contour. Corticomedullary structure is unremarkable.

Right adrenal gland is normal in size (1.82 cm long, 0.73 cm at cranial pole and 0.58 cm at caudal pole), shape and contour. Corticomedullary structure is unremarkable.

**INTERPRETED BY**

Beth Johnson, DVM  
DACVIM

**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.

**IMAGING PERFORMED BY**

Kelly Vazquez, CVT

**Liver**

**HOSPITAL NAME**

North Haledon VC

Liver is subjectively enlarged in size with rounded margins. The parenchyma is heterogenous characterized by multiple, poorly defined hypoechoic nodules within in an otherwise hyperechoic liver parenchyma. The visible vasculature appears normal. Within the diffuse changes there are several discrete, but poorly defined masses. One mass was in the left liver that contains irregular hypoechoic and anechoic areas within an otherwise, hyperechoic mass. The mass measures 6.5 x 8.5 cm. On the right side of the liver there is a similar appearing, poorly defined heterogenous mass that is characterized by irregular, hypoechoic and anechoic/cavitated areas. This measures 4-5 cm in diameter. GB is moderately distended with organized, aggregated and centralized non-gravity dependent sludge. Striations of sludge separated by anechoic areas are noted extending from the lumen to the luminal wall. The wall is mildly thick and hyperechoic. The common bile duct is dilated and measured between 0.6-0.8 cm. Within the distal common bile duct hyperechoic, irregular contents are observed.

**REFERRING VET**

Dr. Mansfield

**INVOICE**

94953

**DATE**

1/4/22



**PATIENT**

**Gastrointestinal**

Alulu Bruinooge

The visible gastric wall is normal in thickness (canine < 0.5 cm and feline < 0.4 cm). The stomach is empty.

**SPECIES**

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.

Canine

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

**BREED**

Mix

**Pancreas**

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

**SEX**

Intact male

**Free Abdomen**

**AGE**

14 years

Lymph nodes are normal with no observed enlargement.

**WEIGHT**

38.5 lbs

**ULTRASONOGRAPHIC FINDINGS**

**Primary Findings**

- Diffusely heterogenous liver. Differentials include benign changes such as steroid hepatopathy or extramedullary hematopoiesis as well as infiltrative round cell or metastatic neoplasia. However, combined with the more discrete, but poorly defined, multi-focal masses described above infiltrative neoplasia such as biliary tract carcinoma or hepatocellular carcinoma versus sarcoma versus metastatic disease possibly from the reported mammary gland tumors are considered much more likely.
- GB findings are most consistent with a mucocele.
- Echogenic luminal contents in the common bile duct could be inflammatory cells/debris/mucous associated with chronic cholecystitis. However, biliary tract neoplasia is also possible.

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**HOSPITAL NAME**

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**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

Recommendations include thoracic radiographs to further assess cardiopulmonary status as well as look for other evidence of metastatic disease if not already performed. Additional diagnostic recommendations include FNA of the liver masses for cytology and culture if the patient's coagulation status is appropriate. While it seems unlikely based on these images that the gross disease can be completely excised an exploratory laparotomy for liver mass removal/excisional biopsy and cholecystectomy may be necessary pending results of the cytology.

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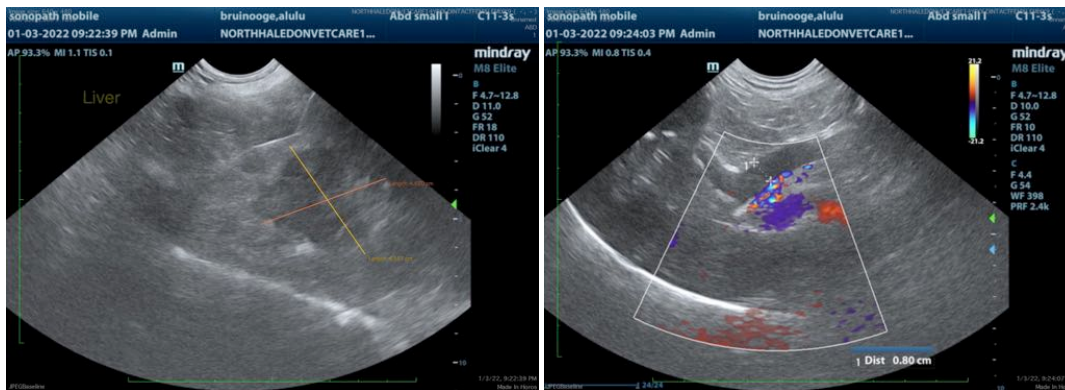
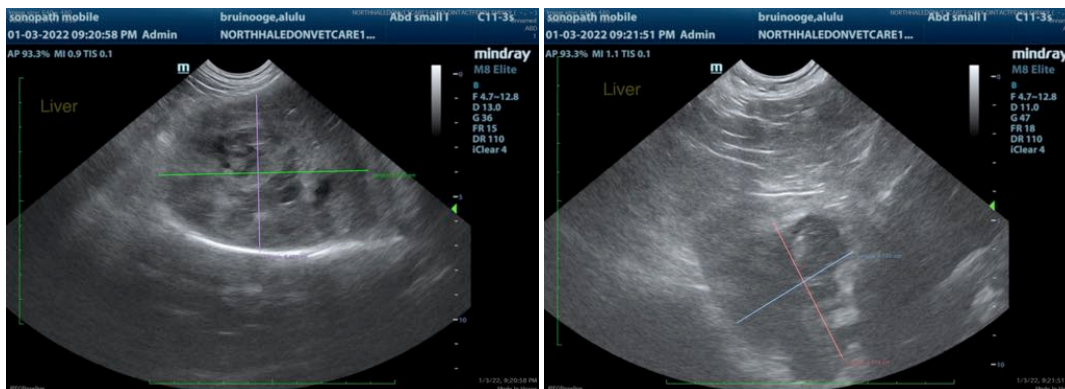
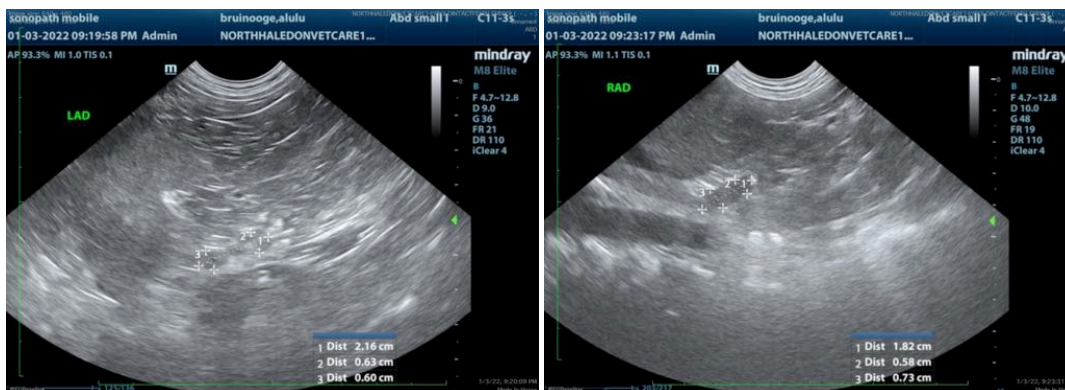
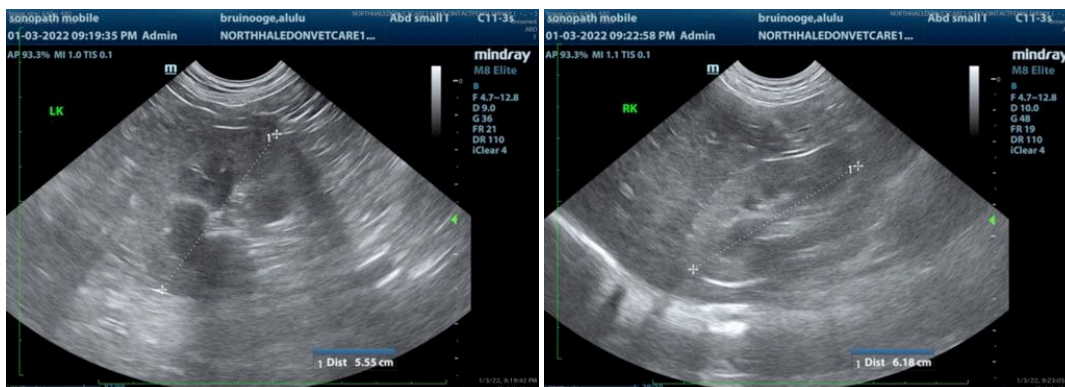
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**SPECIES**

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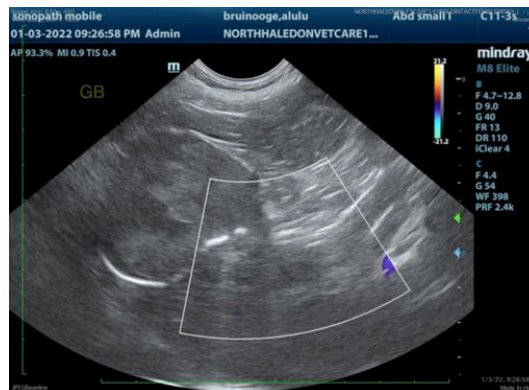
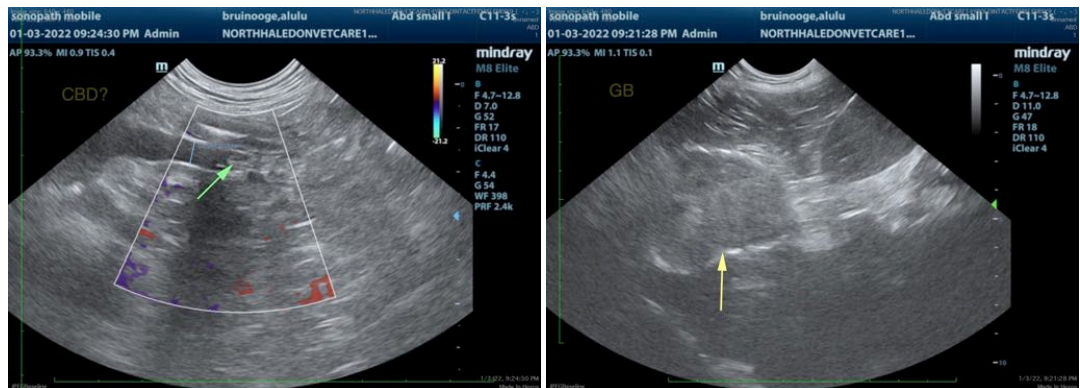
Intact male

**AGE**

14 years

**WEIGHT**

38.5 lbs



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The information and recommendations provided are based on the images presented by the referring veterinarian. 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.

**IMAGING PERFORMED BY**

Kelly Vazquez, CVT

Beth Johnson, DVM DACVIM

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