

PATIENT

Bert Grimes

SPECIES

Canine

BREED

Retriever X

SEX

Male

AGE

7 Years

WEIGHT

38 Pounds

INTERPRETED BY

Lisa Carioto, DVM,
DVSc, Diplomate
ACVIM

IMAGING PERFORMED BY

Dr. Jeff Nelson

HOSPITAL NAME

Willamette VH

REFERRING VET

Dr. Jeff Nelson

INVOICE

36423

DATE

3/24/22

PRESENTING CLINICAL SIGNS

Asymptomatic, abdominal distension History of suspected strychnine ingestion 6/30/21 - hospitalized and recovered
Abnormal PE/Chem/CBC/UA Results: Pending

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder is well filled. The wall is smooth and regular. No abnormalities are present with the trigone or proximal urethra, and there is no evidence of sediment, cystoliths, polyps or a mass.

The left kidney measures 4.29 cm. The capsule is smooth. The cortex of the left kidney is isoechoic to the spleen, i.e., the cortex is hyperechoic compared to normal. A mild loss of the normal definition of the corticomedullary junction is observed. An accumulation of fat is observed within the pelvis. There are no signs of nephroliths or pyelectasia. The echogenicity of the surrounding mesentery cannot be evaluated.

The right kidney measures 5.12 cm. Findings are similar to the left.

Adrenal Glands

The cranial pole of the left adrenal gland measures 0.54 cm. The caudal pole measures 0.45 cm, and it measures 1.85 cm in length. No abnormalities are noted with the gland's shape, overall architecture, echogenicity or echotexture. The phrenico-abdominal vein and surrounding vasculature and mesentery are unremarkable.

A structure that appears to be the right adrenal gland is observed. The cranial pole is 0.67 cm. The caudal pole is 0.74 cm x 1.84 cm in length. A nodule is present at its caudal pole; it does not appear to be a mass. A measurement of 0.74 cm is considered enlarged, particularly for a dog of Bert's stature. The rounded, nodular effect may be due to a benign adenoma, as well as benign hyperplasia. The surrounding vasculature cannot be adequately evaluated.

Spleen

The portions of the spleen that are observed are homogeneous, and its architecture, echogenicity and echotexture are within normal limits. The splenic vein is patent.

Liver

Severe hepatomegaly is noted. The small portion of hepatic parenchyma observed intercostally is homogeneous and does not show any major abnormalities. Another "more normal" region of liver tissue appears mildly heterogeneous, with a slightly coarse, granular echotexture and hypoechoic nodules. The latter may be due to nodular hyperplasia.

A very large cavitory mass is observed between the spleen, left kidney and liver. It measures 7.6 cm in diameter x 12.0 cm in length. The mass appears to be originating from the liver and is comprised of multiple cavitory lesions of variable size with anechoic centre. They have smooth, sharply demarcated thin walls and a thin capsule, some of which have distal acoustic enhancement. Their appearance is highly suggestive of cysts. Some of the cavitory or cystic lesions contain echogenic material, which is consistent with proteinaceous material, for example, mucus. However, hemorrhage cannot be excluded. Two to three markedly hyperechoic, "solid" structures are present in the centre of the mass and are surrounded by additional cavitory lesions. The more "solid" structures are assumed to be hepatic parenchyma.



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The gall bladder cannot be identified due to all of the cavitory lesions within the liver.

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Gastrointestinal

SPECIES

The stomach is pushed caudally as a result of the hepatomegaly and the hepatic mass. No obvious abnormalities are observed with the stomach. The gastrointestinal tract is also displaced caudally. A small amount of free fluid is present surrounding the loops of bowel in the caudal abdomen, including the colon. The stomach, small intestines and descending colon are within normal limits in thickness and definition of wall layers of the GI tract is well preserved.

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Pancreas

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The area of the left pancreas is not visualized due to the mass. The small portion of the right pancreas that is visualized is within normal limits.

SEX

Other

Male

No obvious lymphadenomegaly is observed. However, lymph nodes could easily be missed.

AGE

A small amount of abdominal effusion is present, as mentioned under GI tract.

7 Years

Heart

There are no obvious signs of a mass within the cardiac chambers visualized. There are multiple hyperechoic foci scattered throughout the myocardium. No pericardial or pleural effusion is observed.

WEIGHT

ULTRASONOGRAPHIC FINDINGS

38 Pounds

- Severe hepatomegaly with multiple cavitory lesions, as well as hyperechoic hepatic parenchyma. Although neoplasia, such as adenocarcinoma or carcinoma are differential diagnoses, polycystic liver disease is strongly suspected.
- Nodule present at the caudal pole of the right adrenal gland. Mild adrenomegaly of the right adrenal gland.

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INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

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Polycystic liver disease may occur in dogs. Fine needle aspirates of the cystic lesions may be performed. Mucus may be obtained, although some cysts can contain blood and bile. A coagulation profile (PT/PTT) is recommended, as well as a platelet count, prior to performing the fine needle aspirate as a precaution, colour Doppler is suggested when introducing the needle. Aspirates of the solid tissue is also recommended to rule out neoplasia. Although there are no obvious signs of necrotic tissue on Bert's sonogram, gentle technique is always recommended.

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Dogs with polycystic liver disease can have a normal life. However, they may require intermittent drainage of the cysts depending on the comfort of the patient. Treatment of liver disease may be required depending on the results of the bloodwork.

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The nodule at the caudal pole of the right adrenal gland may be due to nodular hyperplasia or a benign adenoma. Further diagnostics for hyperadrenocorticism may be required in the future, although they are not recommended at the moment due to the likelihood of false positives.

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Bert is an extremely complicated patient, and although some treatment recommendations have been described, an internal medicine consult is suggested in order to describe all possible options in further detail.

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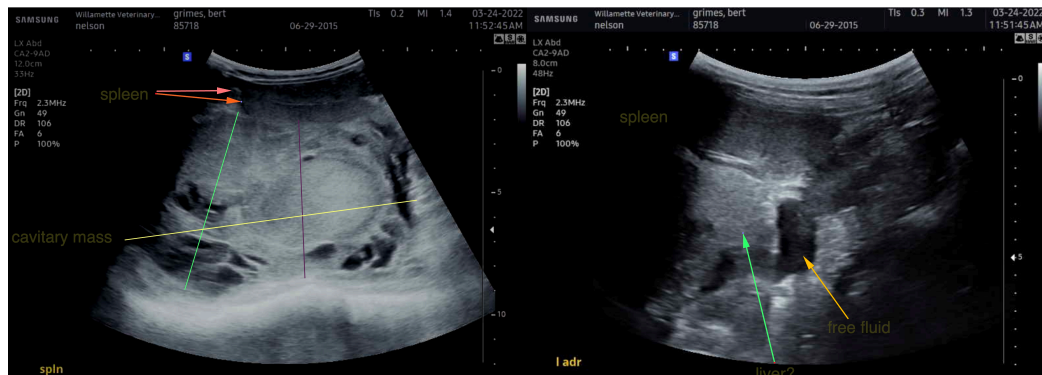
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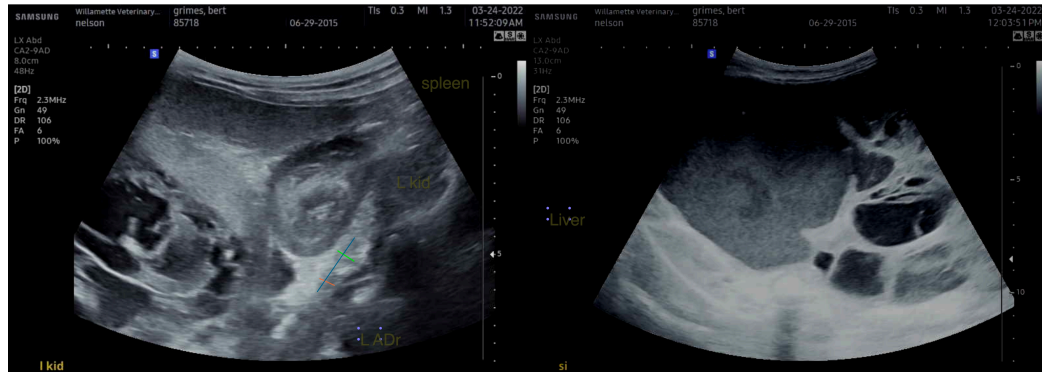
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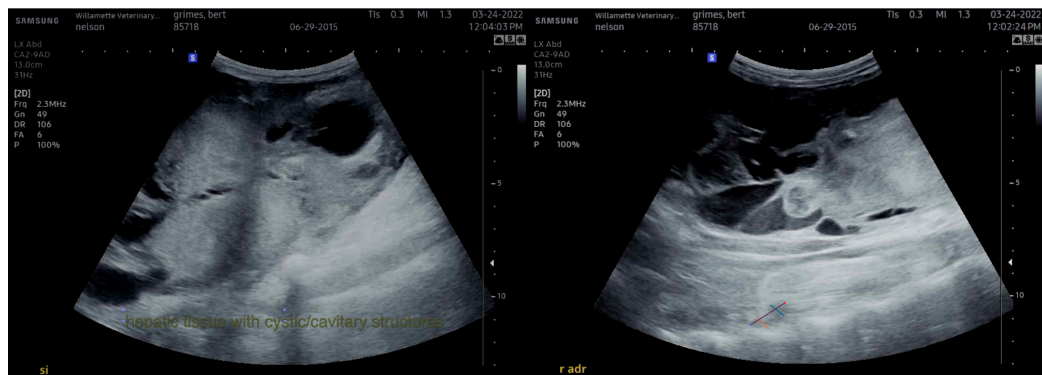


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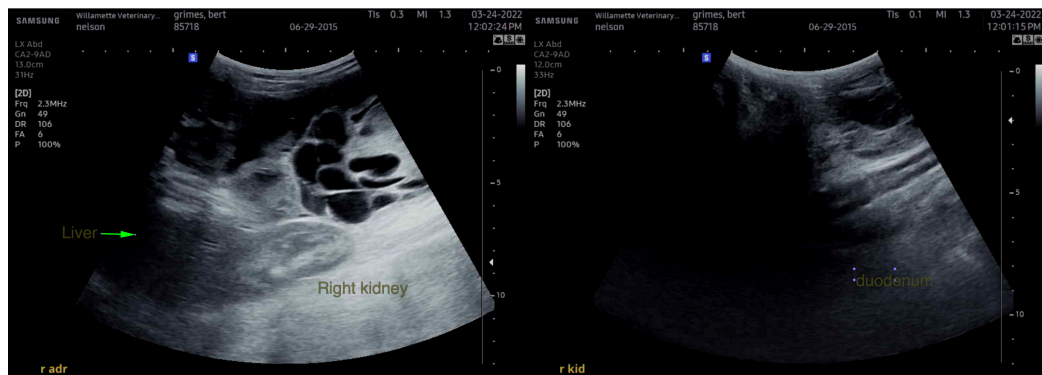


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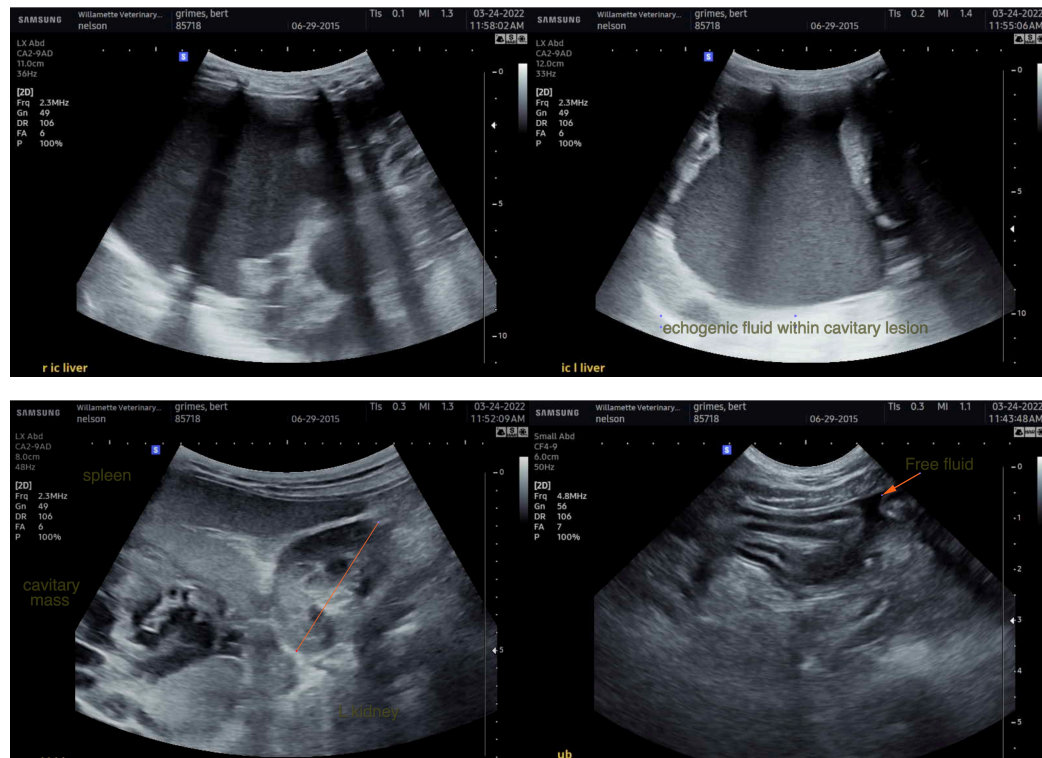
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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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