

PATIENT

PRESENTING CLINICAL SIGNS

Bubs Ware

Patient was brought into Urgent care for vomiting and diarrhea for 3 days. BW and Radiographs performed, on radiographs a mass in the tail end of the spleen.

Abnormal PE/Chem/CBC/UA Results: LYM-0.85, RBC-5.19, MCH-28.4, MCHc-44.2, PCT-0.24, PDWC-37.6

SPECIES

Canine

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

BREED

Urinary System

Boston Terrier

The urinary bladder is not fully distended; it is therefore difficult to assess its thickness, It contains anechoic contents. The wall is very mildly irregular. No abnormalities are noted with the trigone or proximal urethra, and there is no evidence of sediment, cystoliths, polyps or a mass.

SEX

Male

Prostate

AGE

The prostate is homogenous and within normal limits for a neutered male.

13 years

Kidneys

WEIGHT

16.6 lbs

The **left** kidney measures 4.48 cm. The capsule is smooth. The cortex is mildly hyperechoic; it is moderately hyperechoic to the liver. A mild loss of the normal definition of the cortico-medullary junction is present. Mineralizations of the diverticulae and pelvis are present, without evidence of nephroliths or pyelectasia. The surrounding mesentery is not hyperechoic.

INTERPRETED BY

Lisa Carioto, DVM,
DVSc, Diplomate
ACVIM

The **right** kidney measures 5.20 cm (high end of normal reference range for a dog of Bubs' weight). The capsule is smooth. The cortex is mildly hyperechoic; it is moderately hyperechoic to the liver. A mild loss of the normal definition of the cortico-medullary junction is present. Mineralizations of the diverticulae and pelvis are present, without evidence of nephroliths or pyelectasia. The surrounding mesentery is not hyperechoic.

IMAGING PERFORMED BY

Dr. Logas

Aortic bifurcation/trifurcation

HOSPITAL NAME

Bradenton VH

No abnormalities observed.

Adrenal Glands

REFERRING VET

Dr. Logas

The **left** adrenal gland measures 0.50 cm in diameter. No abnormalities are noted with the gland's overall architecture, echogenicity or echotexture. The phrenico-abdominal vein and surrounding vasculature and mesentery are unremarkable.

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The **right** adrenal gland measures 0.63 cm at the cranial pole and 0.40 cm at the caudal pole. A cranial pole is a nodule. However, no abnormalities are noted with the gland's overall echogenicity. The phrenico-abdominal vein and surrounding vasculature and mesentery are unremarkable.

DATE

4/25/22



PATIENT

Spleen

Bubs Ware

The spleen is wider than normal mid-body, where it becomes rounded and heterogeneous, with a few hypoechoic nodules. A mass effect is observed, which appears to be located at the tail, based on the position of one of the views provided. Cavitary lesions are not visualized. Obvious abnormalities are not noted with its vasculature.

SPECIES

Canine

BREED

Boston Terrier

Liver

There are no obvious signs of hepatomegaly. The borders are smooth, but rounded. The liver's echotexture is homogeneous, but mildly hyperechoic. A very mildly hyperechoic region compared to the surrounding parenchyma is visualized. It measures 1.11 cm in diameter x 1.90 cm in length. No abnormalities are observed with the hepatic vessels visualized.

SEX

Male

The gallbladder is markedly distended. The gallbladder wall is within normal limits in thickness and echogenicity. A trivial amount of echogenic material is present within the GB. The cystic and common bile ducts are not visualized, however, there are no obvious signs of an obstruction.

AGE

13 years

Gastrointestinal

A very large amount of gas and fluid are present within the stomach lumen. The gastric wall is within normal limits in thickness and the wall layers are well defined. No obvious abnormalities are observed with its peristalsis.

WEIGHT

16.6 lbs

The duodenum is at the high end of normal reference range at 0.53 cm, however, definition of the wall layers is preserved.

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No abnormalities are observed with a small intestines in terms of thickness or wall definition. Abnormally dilated loops of bowel are not observed.

A large amount of gas and ingesta are present in the transverse colon.

IMAGING PERFORMED BY

Dr. Logas

The colonic wall is not thickened and mural detail is considered normal.

There are no obvious signs of a mass, foreign body, infiltrative disease or an obstruction in the gastrointestinal tract.

HOSPITAL NAME

Bradenton VH

Pancreas

No overt abnormalities are observed with the echogenicity or echotexture of the left limb. There is no evidence of hyperechogenicity of the surrounding mesentery, i.e., signs of active pancreatitis are not present.

REFERRING VET

Dr. Logas

The right limb is not well visualized due to gas in the surrounding GI tract.

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Other

Lymph nodes

No abnormalities are observed

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Bubs Ware **Abdominal effusion** is not visualized.

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ULTRASONOGRAPHIC FINDINGS

- Non cavitary splenic mass, which appears to be at the tail of the spleen, however, hypoechoic regions are also observed mid-body. Differential diagnoses include nodular and lymphoid hyperplasia, as well as extramedullary hematopoiesis, i.e. a malignant process is considered less likely, however, a fine needle aspirate is required to obtain a definitive diagnosis.
- The hyperechoic region observed within the liver is may be due to mild fibrosis or fat. There are no signs of neoplasia. The mild, but diffuse hyperechogenicity may be due to a vacuolar hepatopathy.
- A nodule is present at the cranial pole of the right adrenal gland. The latter may be due to a benign adenoma. An obvious mass is not observed.
- Renal changes are suggestive of age-related degeneration. Pyelonephritis cannot be excluded despite the absence of typical sonographic signs.
- A urinary tract infection cannot be excluded based on the mildly irregular mucosa.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

A urinalysis and urine culture and sensitivity are recommended to exclude a urinary tract infection.

The splenic mass does not show signs of malignancy, however, a fine needle aspirate is required to obtain a definitive diagnosis.

A fine needle aspirate of the liver may be performed if a splenic aspirate is pursued.

Another option is to pursue a splenectomy, which would be both diagnostic and therapeutic. A hepatic biopsy could also be performed at the time of the surgery.

Further diagnostics to evaluate for hyperadrenocorticism are not required if Bubs is not demonstrating clinical signs, however, a urine protein: creatinine ratio and arterial blood pressure are recommended.

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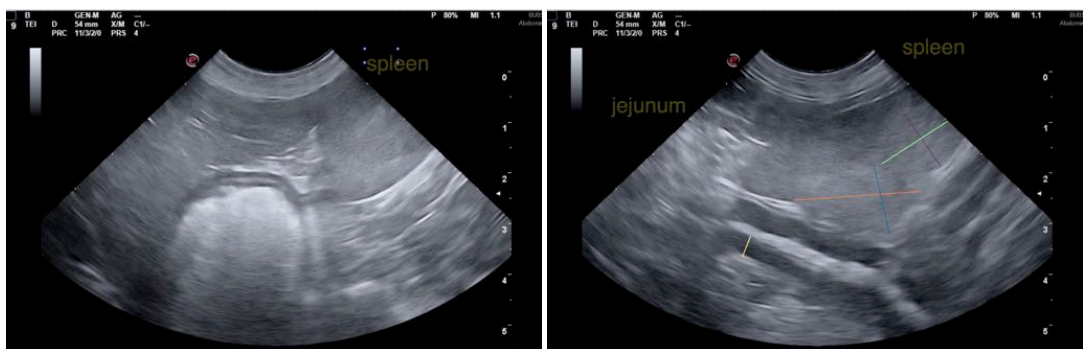
Dr. Logas

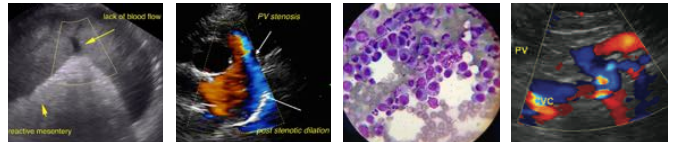
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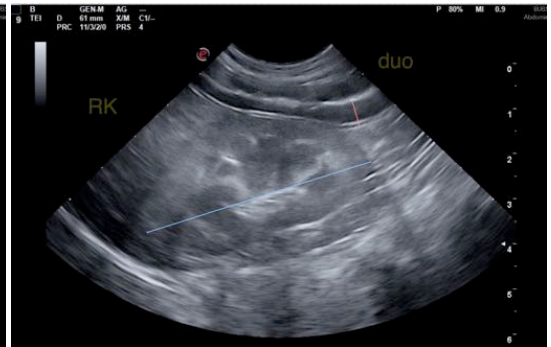
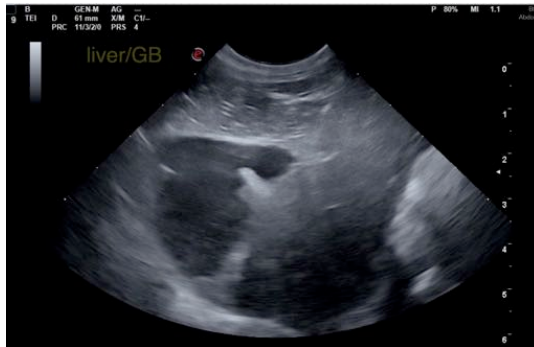
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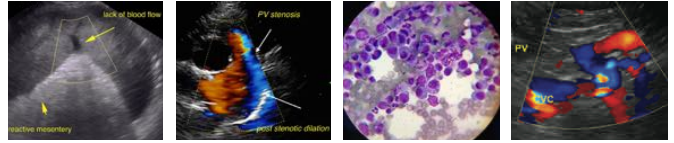
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

Lisa Carioto, DVM, DVSc, Diplomate ACVIM

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