

**DATE**

4/19/22

PRESENTING CLINICAL SIGNS

Lethargic and loose stool.
Current Medications: Prednisone 5mg 1 SID.
Radiographs: Possible mass.
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: STAT requested.
Imaging Performed By: Rachel Brillhart, RDMS.

PATIENT

Buddy Ports

SPECIES

Canine

BREED

Yorkie Poo

SEX

Neutered male

AGE

8/24/11

WEIGHT

15.9 lbs

INTERPRETED BY

Lisa Carioto, DVM,
DVSc, Diplomate
ACVIM

HOSPITAL NAME

Honeygo AH

REFERRING VET

Dr. Wright

INVOICE

99345

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**Urinary System**

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

Kidneys

The **left** kidney measures 4.91 cm. The capsule is smooth, however, the cortex is mildly hyperechoic and a mild loss of the normal definition of the cortico-medullary junction is present. Mineralizations of the diverticulae and pelvis are noted. Very mild pyelectasia, 2.3 mm, is observed, which may be due to intravenous fluids. A hyperechoic nodule at the cranial pole, measuring 4.5 mm x 2.5 mm is visualized. The surrounding mesentery is hyperechoic. Blood flow is considered increased and possibly associated with hypertension.

The **right** kidney measures 4.30 cm. The capsule is smooth, however, the cortex is mildly hyperechoic and a mild loss of the normal definition of the cortico-medullary junction is present. Mineralizations of the diverticulae and pelvis are present. Very mild pyelectasia, 1.2 mm, is observed, which may be due to intravenous fluids. The surrounding mesentery is hyperechoic. Blood flow is considered increased and possibly associated with hypertension.

Adrenal Glands

The **left** adrenal gland measures 0.60 cm at the cranial pole, 0.49 cm at the caudal pole and 1.76 cm in length. No abnormalities are noted with the gland's overall architecture, echogenicity or echotexture. The phrenico-abdominal vein and surrounding vasculature and mesentery are unremarkable.

The **right** adrenal gland measures 1.52 cm at the cranial pole, 1.13 cm at the caudal pole and 2.23 cm in length. The entire gland is "plump" and enlarged, however, an obvious mass is not observed. No abnormalities are noted with the gland's overall echogenicity or echotexture. The phrenico-abdominal vein and surrounding vasculature and mesentery are unremarkable.

Spleen

A mass measuring 5.34 cm in diameter x 7.11 cm in length is observed. It is severely heterogeneous, consisting of anechoic lacunae, as well as a few circular anechoic lesions of variable size. However, a large part of the mass is solid and comprised of hyper and hypoechoic nodules and ill-defined "patches". Portions of the mass are vascularized based on evaluation with colour Doppler.

The more normal portion of the spleen is diffusely hypoechoic and has a diffuse, milky to moth eaten appearance.

Multiple hypoechoic masses of various size are also observed scattered throughout the omentum. The mesentery is severely hyperechoic.

Liver

Hepatomegaly is present with rounded borders. A mildly coarse echotexture is observed, which is consistent with hepatic parenchyma in a dog of Buddy's age. However, more heterogeneous areas are also noted, which may be due to infiltrative disease.

The gallbladder wall is within normal limits in thickness and echogenicity. There is no evidence of echogenic material within the GB. There are no obvious signs of an obstruction.

Gastrointestinal

The gastric wall is within normal limits in thickness and the wall layers are well defined. The mesentery surrounding the stomach is hyperechoic.

Stippling and fogging of the mucosa of the duodenum, and other segments of the small intestine are present. However, the small intestinal wall thickness and the definition of the wall layers is preserved. Abnormally dilated loops of bowel are not observed.

The colonic wall is not thickened and mural detail is considered normal. Soft stools are present within the descending colon.

Pancreas

A proper evaluation of the pancreas is difficult to perform due to the severe hyperechogenicity of the surrounding mesentery. The latter which is to the splenic and hepatic masses rather than pancreatitis. The portion of the pancreas that is visualized is mildly heterogeneous with a coarse echotexture, which is suggestive of age related changes.

Other

Lymph nodes

No abnormalities are observed

Abdominal effusion

A scant amount of anechoic fluid is visualized ventral to the urinary bladder and surrounding the GI tract.

Heart

No pericardial or pleural effusion is identified. Contractility appears within normal limits. Subjectively, the left atrium is slightly enlarged. A mass is not observed in any of the chambers evaluated. However, a mass may be overlooked in the absence of pericardial effusion.

ULTRASONOGRAPHIC FINDINGS

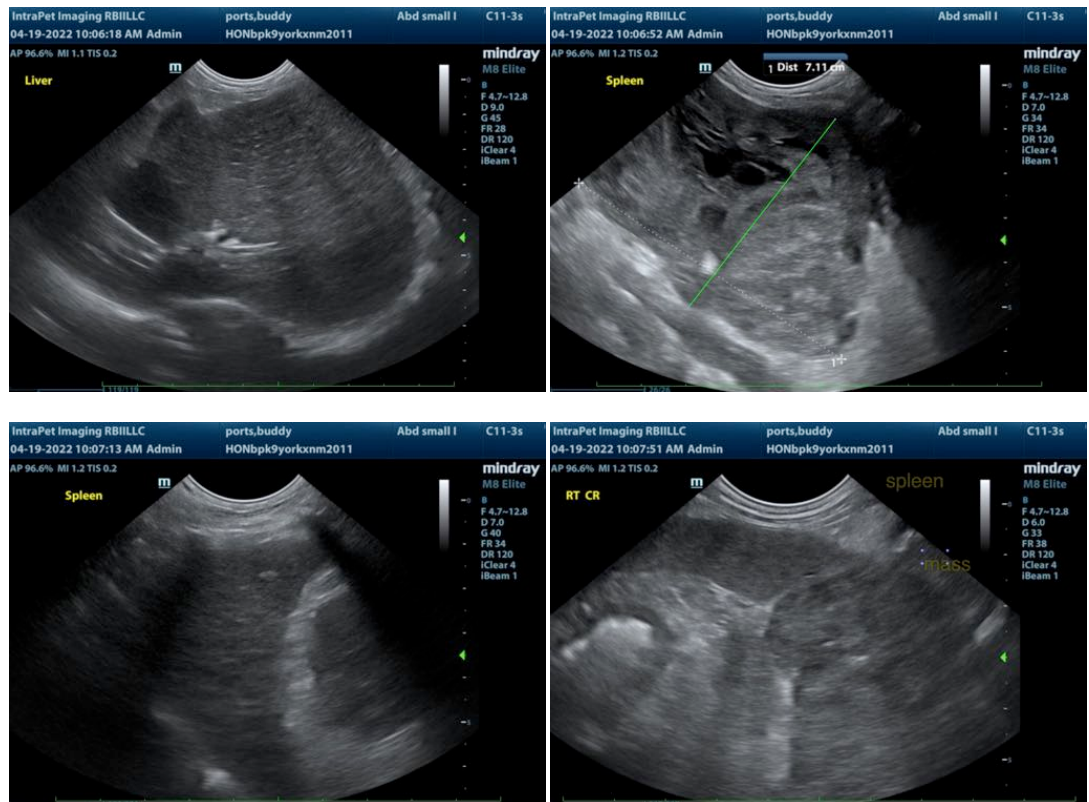
- Neoplasia is suspected as the cause of the splenic mass. For example, histiocytic sarcoma, or other form of sarcoma is suspected to be affecting the spleen as the primary organ, however, metastases to the liver and omentum may also be present based on their appearance, for example, multiple hypoechoic nodules are noted in the omentum. The more heterogeneous areas observed in the liver may be due to metastases, however, nodular hyperplasia remains a differential diagnosis.
- Neoplasia is the likely cause of immune-mediated hemolytic anemia (secondary immune-mediated hemolytic anemia), assuming spherocytes and agglutination were noted on Buddy's CBC. Histiocytic sarcomas can cause erythrophagia and anemia.

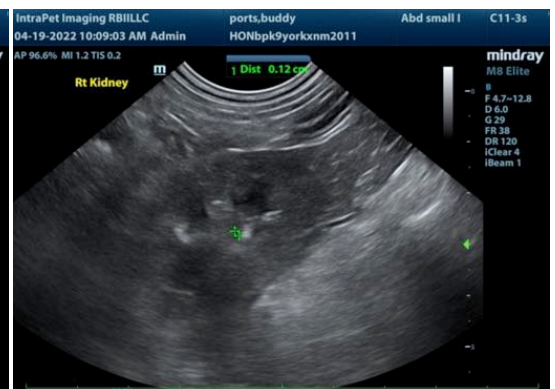
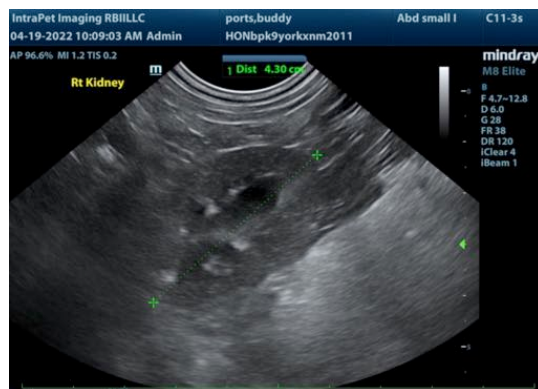
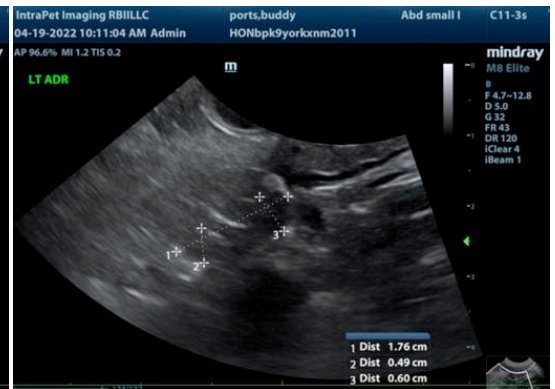
- The plump right adrenal gland may be due to early development of a mass, adrenal hyperplasia secondary to stress (chronic illness) or a benign adenoma. Infiltration of fat is also possible. Although a mass is not visualized, metastases cannot be excluded.
- High index of suspicion of hypertension based on renal blood flow. An arterial blood pressure is suggested based on the renal blood flow.
- Very mild degenerative changes of both kidneys, which are suggestive of age related degeneration.

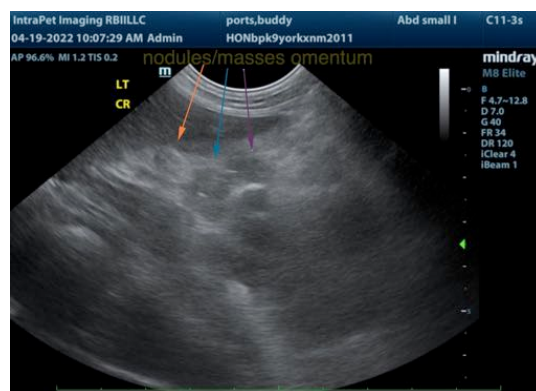
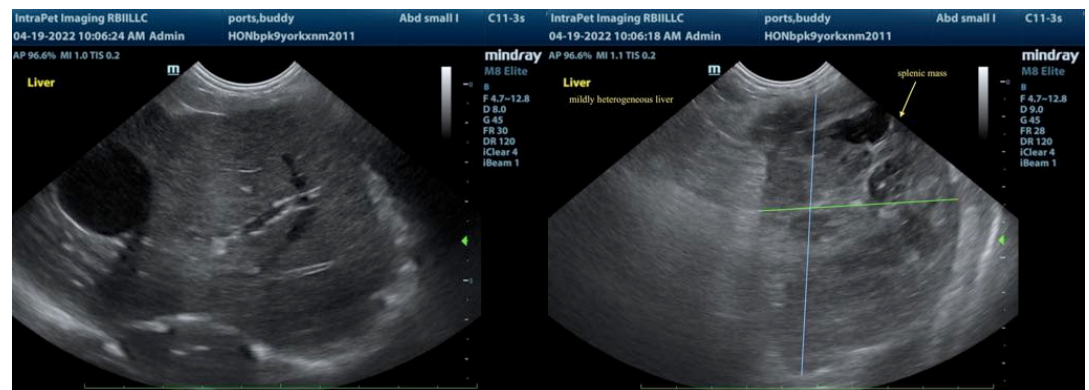
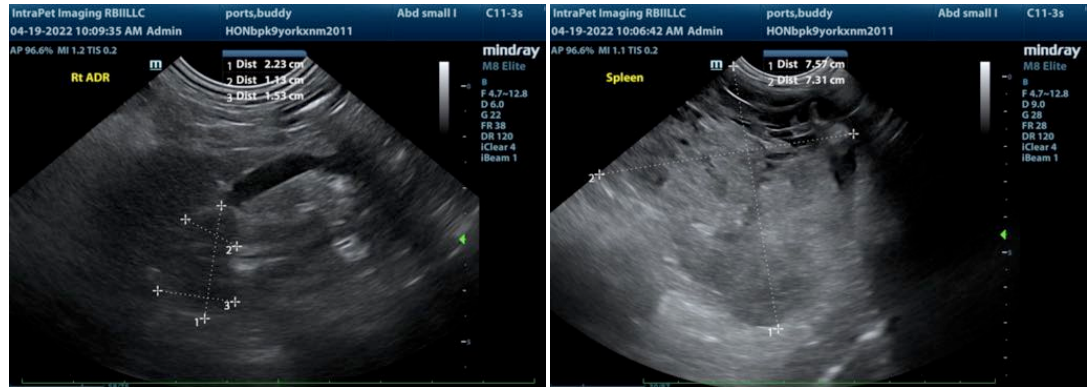
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

A fine needle aspirate of the solid regions of the neoplasm and omental lesions (i.e. possible metastatic lesions) are required to confirm the suspicion of histiocytic sarcoma or other form of sarcoma.

Unfortunately, long term prognosis for this tumour is guarded and treatment of the IMHA will be difficult without treating the underlying cause.







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.

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