



**PATIENT PRESENTING CLINICAL SIGNS**

Roxi Messineo History of acute ADR, weakness, labored breathing, distended abdomen. + fluid wave.

**SPECIES ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**Canine Urinary System**

The urinary bladder is mildly distended with anechoic urine. The Bladder wall appears mildly thickened and somewhat irregular, measuring 0.67 cm. The area of the trigone, proximal urethra and ureteral papillae appear normal and free of masses or evidence of calculi. Findings are most consistent with diffuse cystitis or lack of urine distention.

**BREED**

Boxer x Lab

**SEX**

Spayed Female

The left kidney has a normal shape and size (6.17 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

**AGE**

11 Years

The right kidney is not clearly visualized. It is likely obscured by the large abdominal mass.

**Adrenal Glands**

**WEIGHT**

79 Pounds

The left adrenal gland is normal in size measuring 0.73 cm at the caudal pole. It is observed in its normal position cranial to the left renal artery. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

The right adrenal gland is not clearly visualized. It is likely obscured by the large abdominal mass.

**Spleen**

**INTERPRETED BY**

Kathleen Sennello DVM,  
MS, Diplomate ACVIM  
(Small Animal Internal  
Medicine)

The spleen is subjectively normal in size. The spleen echotexture is heterogenous and mottled, the splenic capsule is smooth with no irregularities. The blood flow through the hilus and splenic parenchyma appears normal. There is a cavitated hypoechoic nodule towards the cranial aspect of the spleen measuring 1.23 cm x 1.74 cm. Additionally, there is a very large, mixed echogenicity, cavitated, and likely ruptured mass in the cranial abdomen, measuring greater than 8.79 cm x 9.1 cm and surrounded by free fluid. This mass is likely arising from the spleen or liver, but a direct attachment is not visualized (suspect liver over spleen).

**IMAGING PERFORMED BY**

Kelly Vazquez

**Liver**

**HOSPITAL NAME**

Saddlebrook VC

The liver is large in size and irregular. The parenchyma is heterogenous in echotexture with subtle, indistinct focal mottling. The visible portions of the vasculature and biliary tract appear normal. There is a very large mixed echogenicity cavitated and likely ruptured mass effect in the cranial abdomen measuring greater than 8.79 cm x 9.1 cm. I suspect this mass is of hepatic origin, but cannot excluded splenic origin as a possible.

**REFERRING VET**

Dr. Aronovici

The gallbladder lumen is moderately distended. The wall of the gall bladder is not thickened and has a smooth mucosal surface. Luminal contents are primarily anechoic. The cystic and common bile ducts are normal/not visible.

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**Gastrointestinal**

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The stomach contains minimal luminal contents. It measures at a normal thickness of <0.7cm with some variability due to the presence of rugal folds. The distinction of the gastric wall layers is adequate and there is no impression of reduced peristaltic activity. No masses or focal lesions were observed.



**PATIENT**

Roxi Messineo

The visualized areas of duodenum, jejunum and ileum have a uniform diameter with minimal fluid distension. Wall appears subjectively, mildly increased. Bowel loops follow a typical curvilinear path with distinct wall layering. Duodenum wall measured 0.51 cm. Jejunum wall measured 0.45 cm. Visualized peristalsis appears appropriate. There are no focal bowel lesions observed, but the bowel appears thickened and corrugated in some focal areas.

**SPECIES**

Canine

The ileocecal junction was visualized and exhibited normal intact wall layering and is subjectively of normal thickness. Sections of colon are visualized with formed fecal material and gas shadowing distally. There is no observed focal or generalized colon wall thickening or loss of layering.

**BREED**

Boxer x Lab

**Pancreas**

The area of the pancreas is normal and isoechoic to surrounding mesentery. There is no evidence of nodules or cystic lesions. There is no evidence of regional mesenteric inflammation or fluid.

**SEX**

Spayed Female

**Free Abdomen**

There is a large volume of echogenic free fluid that is most likely consistent with blood. Additionally, there are abnormal hypoechoic lymph nodes visualized in the abdomen. One of these lesions is in the cranial abdomen, measuring 2.7 cm x 1.7 cm and is most consistent with either an abnormal lymph node or omental metastasis. The omentum is generally irregular and of increased echogenicity.

**AGE**

11 Years

**Other**

**WEIGHT**

79 Pounds

A brief view of the heart was submitted. No significant pericardial effusion was seen.

**PRIMARY FINDINGS**

- Large, irregular, severely heterogeneous liver with likely cavitated, mixed echogenicity mass – Concern is very high for a neoplastic process and a ruptured cranial abdominal mass.
- Mottled spleen with cavitated hypoechoic nodule and possible cranial abdominal mass effect – A heterogeneous mass with cavitations is present within the splenic parenchyma. The mass distorts the splenic capsule. Differentials for the mass include neoplasia (hemangiosarcoma, hemangioma), hematoma, abscess, or other. A neoplastic process is favored. The larger mass effect described is either of hepatic or splenic origin, and there is concern that it has ruptured.
- Large, irregular, hypoechoic nodules in the mesentery – This is most consistent with enlarged lymph nodes or omental metastasis.
- Large volume echogenic free fluid – Suspect this is consistent with a hemoabdomen. Recommend sampling.

**INTERPRETED BY**

Kathleen Sennello DVM,  
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**IMAGING PERFORMED BY**

Kelly Vazquez

**HOSPITAL NAME**

Saddlebrook VC

**REFERRING VET**

Dr. Aronovici

**SECONDARY FINDINGS**

- Thickened, irregular urinary bladder wall – The bladder mucosal changes could be consistent with cystitis or artifactual due to lack of adequate luminal distension. Bladder neoplasia cannot be ruled out but is considered unlikely in this patient.
- Thickened corrugated duodenum – Likely consistent with focal enteritis/inflammation.

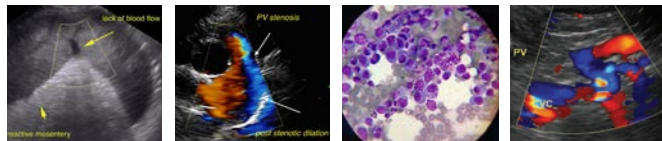
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**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**



**PATIENT**

Roxi Messineo

**SPECIES**

Canine

**BREED**

Boxer x Lab

**SEX**

Spayed Female

**AGE**

11 Years

**WEIGHT**

79 Pounds

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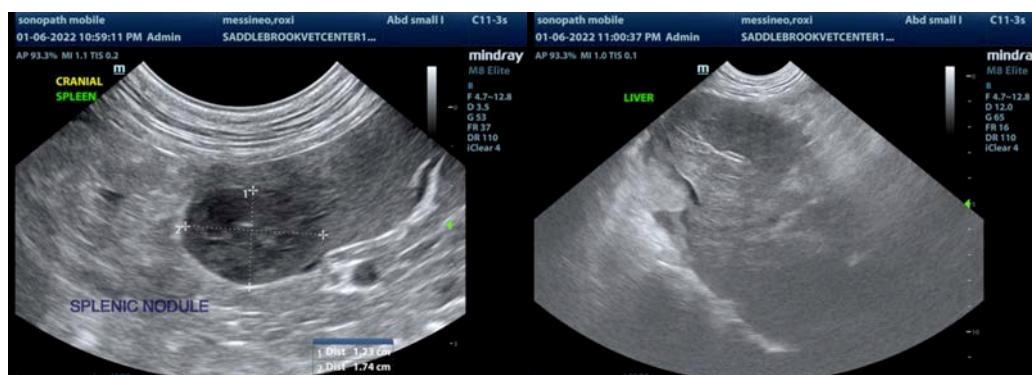
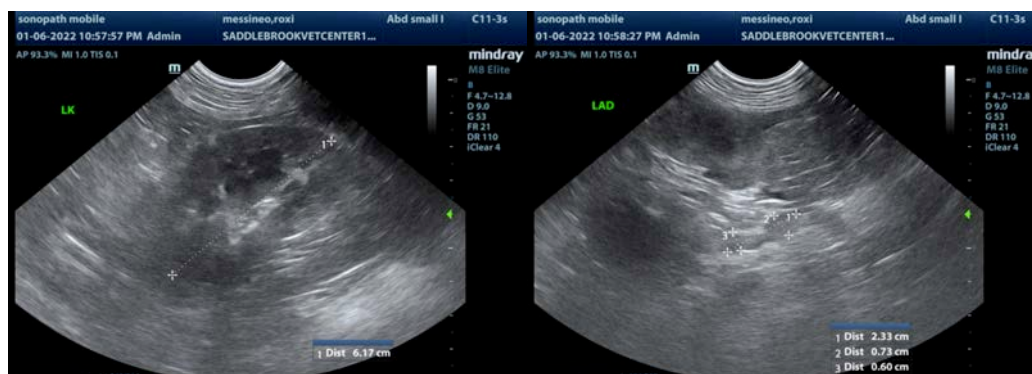
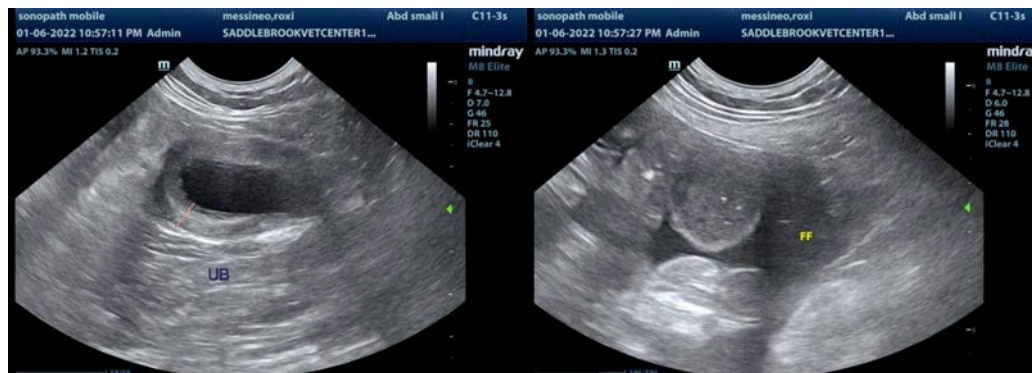
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**REFERRING VET**

Dr. Aronovici

A very large cystic cranial abdominal mass is visualized. This seems most likely to be arising from the liver, but could be of splenic origin. Additionally, there is a cavitated nodule on the spleen, and some abnormal lymph nodes visualized in the omentum. Concern is high for a possible neoplastic process. Recommend referral to a veterinary surgeon for exploratory surgery for both therapeutic and diagnostic purposes. The patient may need to be stabilized prior to surgery and may need blood products. Recommend 3-view thoracic radiographs. Prognosis is guarded.

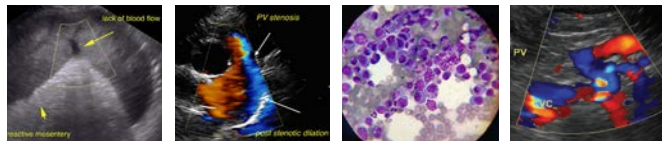


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**PATIENT**

Roxi Messineo

**SPECIES**

Canine

**BREED**

Boxer x Lab

**SEX**

Spayed Female

**AGE**

11 Years

**WEIGHT**

79 Pounds

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**HOSPITAL NAME**

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**REFERRING VET**

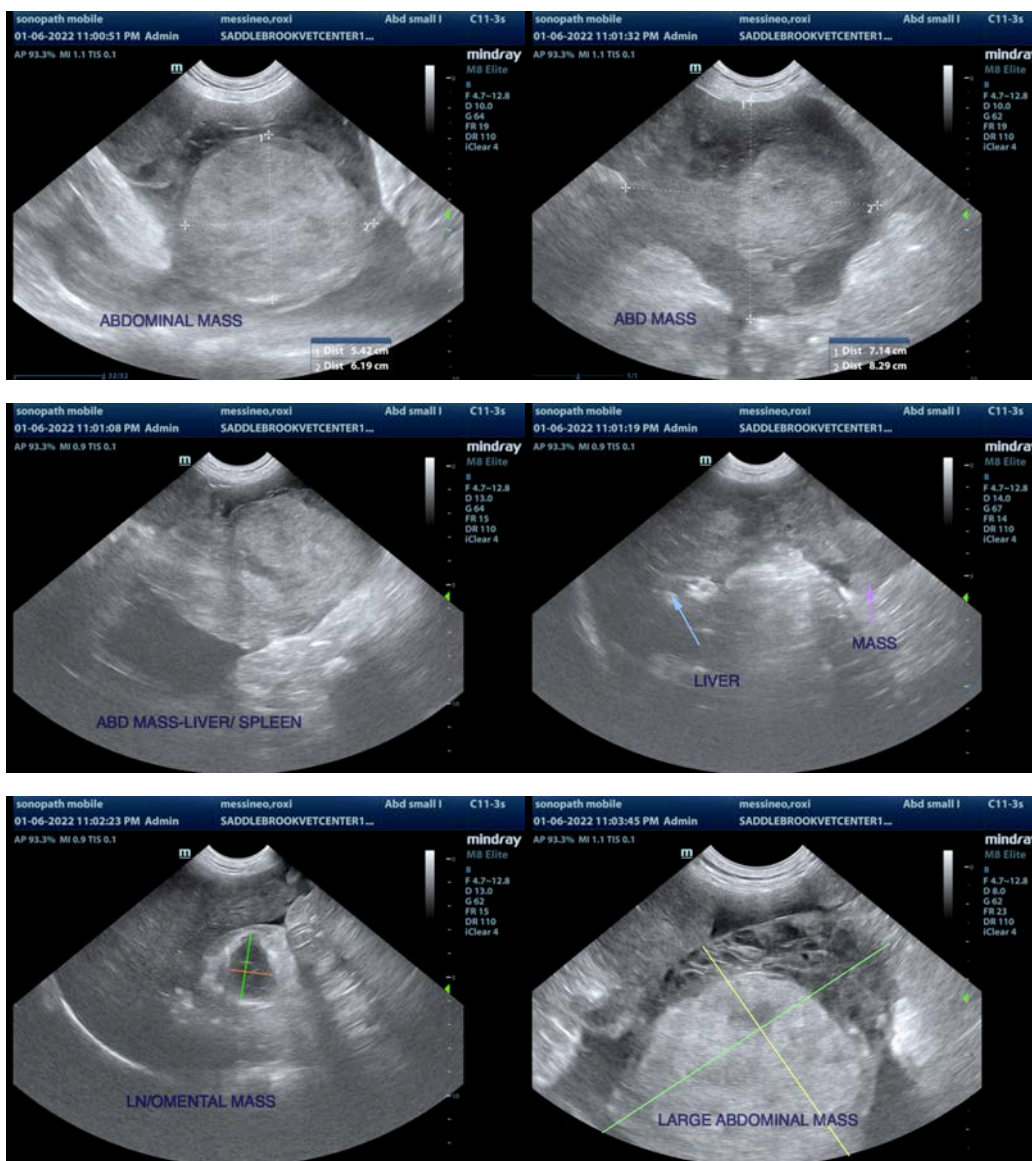
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

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