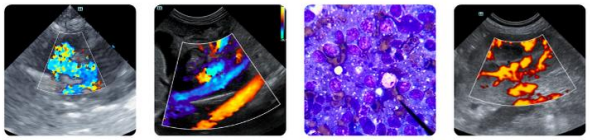


PATIENT

Coco Linden

SPECIES

Canine

BREED

Boxer

SEX

FS

AGE

12yr

WEIGHT

44lb

INTERPRETED BY

Alicia Angosto Guerrero, DMV, PgDip, MSc.

IMAGING PERFORMED BY

Dr. Ryan Moreno

HOSPITAL NAME

Seven Fields Veterinary Hospital

REFERRING VET

Dr. Ryan Moreno

INVOICE

23126

DATE

12/05/2025

PRESENTING CLINICAL SIGNS

P presented for mass evaluation on the face. It was ulcerating and not getting better and we were going to surgically removed it. Pre surgical bloodwork revealed elevated liver and TBili values. Doing well at home with no concerns.

Abnormal PE/Chem/CBC/UA Results: CBC: - HCT 61% - Low Plt (96) Chem: - ALP (593) - ALT (747) - AST (178) -TBili (0.4) - Glob (3.9) T4: 0.8

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The bladder lumen is normally distended, and the wall of the urinary bladder appears thin and smooth. The urine is anechoic. Normal appearance of the proximal urethra and vesicoureteral junction. There are no calculi and no evidence of inflammatory or neoplastic changes.

The left kidney is normal in shape and size: 5.88×3.44 cm, and the thickness of the cortex is 0.59 cm in the sagittal plane.

The right kidney is normal in shape and size: 5.47×3.02 cm, and the thickness of the cortex is 0.54 cm in the sagittal plane.

Both: The cortex is isoechoic compared to liver parenchyma. The corticomedullary ratio is normal, and the corticomedullary definition is preserved. There is no evidence of pyelectasia, nephroliths, or hydronephrosis. Color Doppler shows a normal pattern.

Adrenal Glands

The left adrenal gland measures 0.68 cm at the cranial pole and 0.70 cm at the caudal pole. The right adrenal gland could not be adequately measured for accurate assessment; the measurement obtained appears underestimated.

Spleen

In the videos labeled as spleen and at the level of the cranial left abdomen, a large heterogeneous mass with irregular margins and areas of necrosis is observed, measuring approximately 6 cm. A hypoechoic nodule measuring 3.3×2.7 cm and a 1 cm nodule are also present, along with multiple hyperechoic nodules.

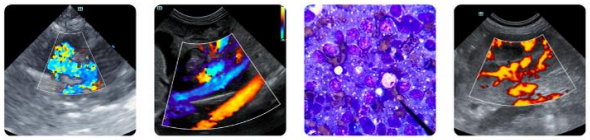
Liver

The liver is subjectively normal in size, with sharp edges and a regular contour. The liver parenchyma looks uniform and is isoechoic compared to the falciform fat, with hypoechoic areas approximately 1 cm in diameter. No hepatic lymphadenopathy is observed.

The gallbladder lumen is normally distended. The wall is thin, and the contents show a moderate amount of biliary sludge. No evident dilation of the cystic duct or common bile duct is observed.

Gastrointestinal

The stomach is empty and folded, with mural thickness (4.36 mm) and preserved wall layering. Duodenum: 3.42 mm. Jejunum: 3.14 mm, normal wall layering. No signs of inflammation, ileus, or foreign material are identified.



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Colon: 1–1.24 mm, practically empty.

Pancreas

The pancreatic regions examined did not show evident signs of inflammation.

Free Abdomen

No abdominal effusion or peritonitis is observed. Cranial mesenteric lymph nodes are not visualized, but the surrounding regions appear unremarkable. The iliac trifurcation is normal.

PRIMARY FINDINGS

- Large heterogeneous splenic mass with irregular margins and necrotic regions (~6 cm).
- Additional splenic nodules: 3.3×2.7 cm, 1 cm, and multiple hyperechoic nodules.
- Several hypoechoic hepatic nodules (~1 cm).
- Moderate biliary sludge without biliary obstruction.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Abdominal ultrasonography reveals a large, heterogeneous, irregularly marginated mass in the left cranial abdomen, located in the region labeled as the spleen. The lesion contains mixed echogenicity with hypoechoic regions suggestive of necrosis. Other smaller adjacent hypoechoic nodules (3.3×2.7 cm, 1 cm), and multiple small hyperechoic nodules (myelolipomas or Bates bodies) are also observed. The liver shows several small hypoechoic nodules (approximately 1 cm) that are nonspecific. They do not have the appearance of regenerative or hyperplastic nodules, but they could represent metastatic disease, especially in the context of a large splenic mass. There is no hepatomegaly, and no biliary dilation is observed. The elevation in liver enzymes may reflect parenchymal injury due to metastatic infiltration, hypoxic or necrotic changes, or reactive hepatopathy. The gallbladder contains a moderate amount of sludge without evidence of obstruction.

Overall, the combined imaging findings — a large necrotic splenic mass with additional splenic nodules and suspicious hepatic lesions, together with markedly elevated liver enzymes — strongly suggest splenic malignancy. Definitive diagnosis requires cytology or histopathology, but given the appearance and signalment, hemangiosarcoma remains the primary concern.

Recommendations

- In dogs with large heterogeneous splenic masses consistent with hemangiosarcoma or sarcoma, splenectomy is generally the recommended first-line approach rather than splenic FNA, as cytology is low-yield and rarely alters management. However, when concurrent hepatic nodules are present—as in this case—fine-needle aspiration of the liver is suggested for staging before committing to surgery.
- Thoracic radiographs or CT: to evaluate pulmonary metastasis, given the high metastatic potential of the suspected splenic tumor.
- Consider abdominal CT for surgical planning, evaluation of vascular involvement, and better characterization of hepatic nodules.
- Full serum coagulation profile (PT, aPTT) due to potential coagulopathies associated.

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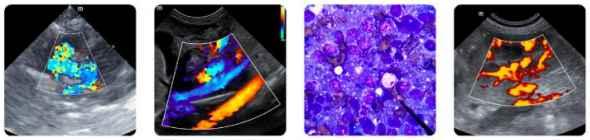

Clinical Sonography & Telecytology
Educational Teleconsultation Services™

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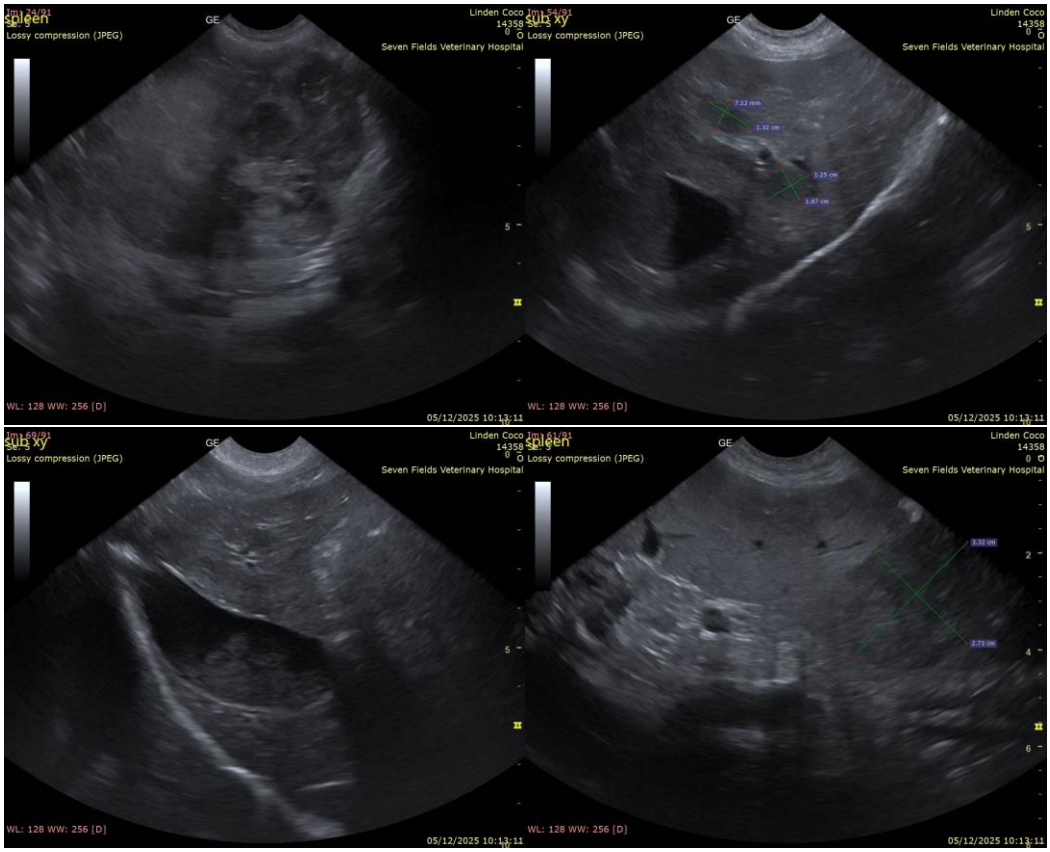

The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

Alicia Angosto Guerrero, DMV, PgDip, MSc.

info@SonoPath.com