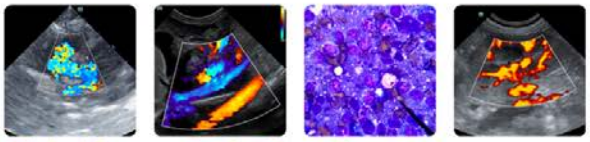


PATIENT

Titan Kozakevich

SPECIES

Canine

BREED

American Bulldog

SEX

Male

AGE

8 Years

WEIGHT

27.4 kg

INTERPRETED BY

Greg Kuhlman, DVM, DACVIM (SAIM)

IMAGING PERFORMED BY

Dr. Iacovides

HOSPITAL NAME

Tuxedo Animal Hospital

REFERRING VET

Dr. Valencia

INVOICE

75170

DATE

5/14/26

PRESENTING CLINICAL SIGNS

Vomiting, diarrhea, excessive water intake to the point of looking bloated, significant quivering, lost muscle mass. Prostatomegaly. Chronic GI disease. Current meds: Metronidazole 250mg BID and Fortiflora

Abnormal PE/Chem/CBC/UA Results: BCS 3/9 Possible abdominal distension on exam Prostate is enlarged and firm on rectal exam. No perianal masses CBC: WBC 23.76x10e9/l (5.05-16.76) Neut 19.1 (2.95-11.64) Mono 1.27 (0.16-1.12) CHEM: GLOB 49 G/L (25-45)

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The bladder appears overall normal. It is moderately distended with urine.

The prostate is significantly irregular in shape and measures 3.2 cm x 4.8 cm in size. There appears to be a mass lesion at the caudal pole that measures 2.3 cm x 3.1 cm. The mass is heterochoic. There are ill-defined hyperechoic regions throughout the prostate possibly consistent with an inflammatory process.

The right kidney presents normal size (7.6 cm) with normal shape and architecture. Normal corticomedullary distinction. No pyelectasia, ureteral dilation or nephrolithiasis.

The left kidney presents normal size (7.5 cm) with normal shape and architecture. Normal corticomedullary distinction. No pyelectasia, ureteral dilation or nephrolithiasis.

Adrenal Glands

The right adrenal gland presents normal shape and homogenous parenchyma. The phrenic vasculature is unremarkable. The caudal pole measures 4.9 mm.

The left adrenal gland presents normal shape and homogenous parenchyma. The phrenic vasculature is unremarkable. The cranial pole measures 4.0 mm and the caudal pole measures 5.9 mm.

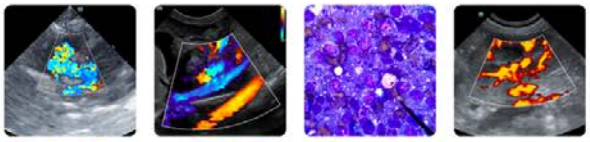
Spleen

The visible spleen appears normal with normal blood flow.

Liver

In what appears to be the mid liver is a 1.8 cm in diameter target lesion present that is not capsule displacing and has a hypoechoic rim with hyperechoic center. A 2nd similar lesion is noted in the left ventral liver. A 3rd visible hepatic mass is different from the previous two. It measures 4.8 cm x 2.8 cm and is isoechoic and ovoid in shape. A 4th hepatic lesion is seen measuring 4.9 cm x 5.6 cm. This lesion is isoechoic and rounded, moderately cystic. In the right liver there is a multilobulated mass lesion with isoechoic echogenicity to the liver with a mildly heterochoic echotexture. Two of the larger masses in the right liver measure 2.8 cm x 3.6 cm and 3.3 cm x 3.4 cm.

The gallbladder presents normal size with anechoic contents. Normal gallbladder wall. No evidence of bile duct distention or obstruction.



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Gastrointestinal

The stomach and intestines have normal wall layering and thickness. Colon contains normal contents with normal wall thickness.

Pancreas

The visible pancreas is normal in size with normal echogenic parenchyma and surrounded by normal peri-pancreatic mesentery.

Free Abdomen

Within the mid abdomen there are multiple enlarged heterochoic, what appear to be enlarged lymph nodes present. A representative node measures 2.0 cm x 2.8 cm.

No free abdominal fluid is seen.

ULTRASONOGRAPHIC FINDINGS

- Irregular prostate with mass.
- Hepatic lesions.
- Multiple enlarged lymph nodes.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The two target type lesions in the liver are suspected to be metastatic neoplasia, unlikely to be benign regenerative nodules. Recommend fine needle aspirate with submission for cytology to confirm.

Differentials for the isoechoic ovoid nodules in the liver include metastatic neoplasia (although seems less likely based on appearance). These are more likely to be primary hepatobiliary neoplasia such as hepatocellular carcinoma, less likely biliary carcinoma. However, owing to cavitation of the 4th lesion, hemangiosarcoma is also a potential. Recommend fine needle aspirate with submission for cytology of both lesions.

The multilobulated mass lesion in the right liver is suspected to be possible metastatic neoplasia. Also possible primary hepatobiliary neoplasia, hepatocellular carcinoma versus cholangiocarcinoma. Possibility for infiltrative disease such as histiocytic sarcoma. Fine needle aspirate recommended for cytology.

Regarding the prostate, a benign disease such as bacterial prostatitis is unlikely. Suspect malignant neoplasia, prostatic carcinoma versus transitional cell carcinoma. This may be the cause of several of the mass lesions seen within the liver. Recommend submitting BRAF testing to screen for prostatic cell carcinoma or transitional cell carcinoma.

It is unclear if the patient has a urinary obstruction due to prostatic lesion at this time. Recommend carefully monitoring patient's urination habits.

The enlarged lymph nodes most certainly represent metastatic neoplasia. Recommend fine needle aspirate and submission for cytology.

If not already performed, recommend 3-view chest radiographs to screen further for metastatic neoplasia.

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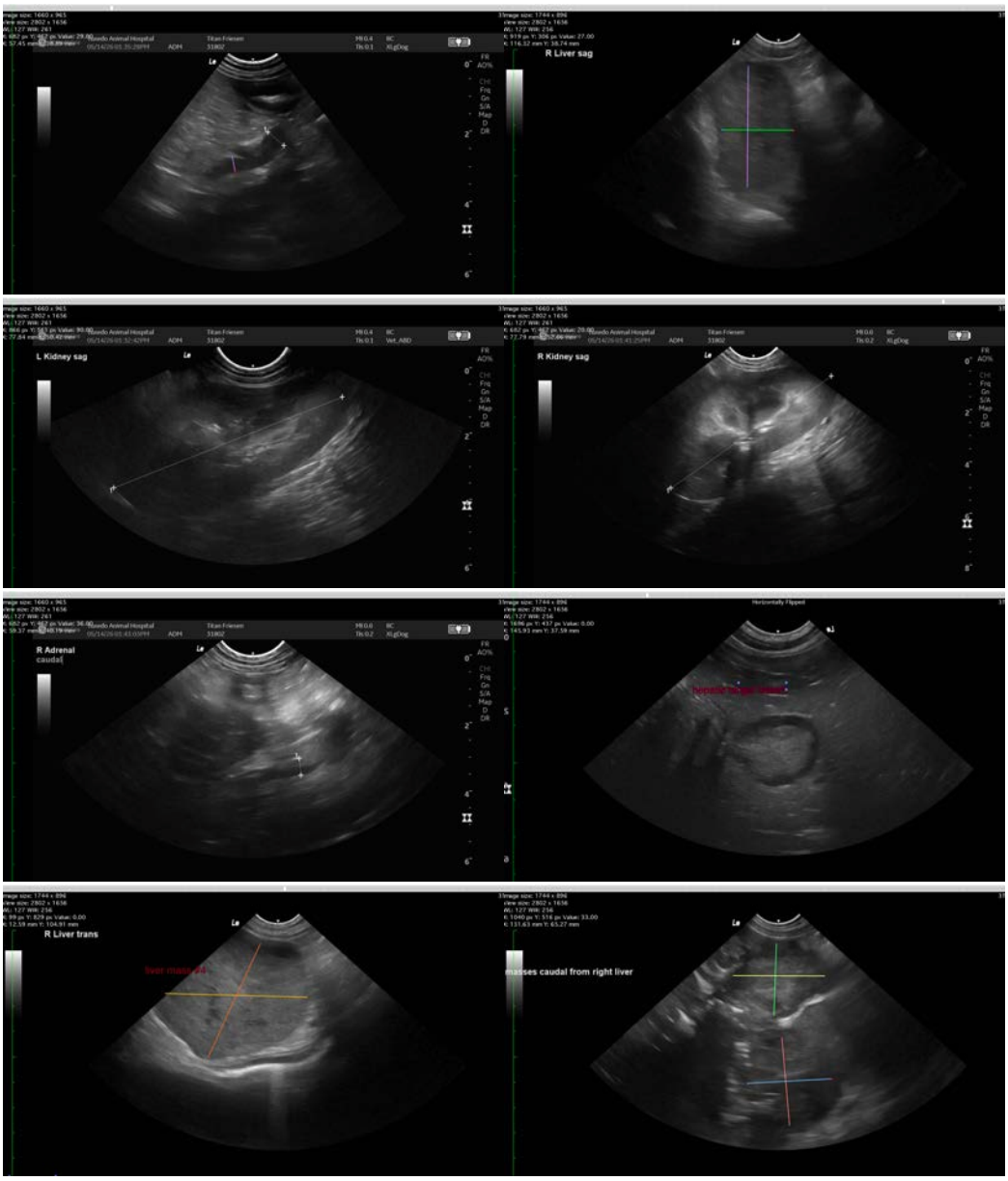
At this time, given the number of and significance of the findings on this ultrasound, prognosis appears poor to grave.



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.

Greg Kuhlman, DVM, DACVIM (SAIM) Veterinary Internal Medicine Specialist info@SonoPath.com