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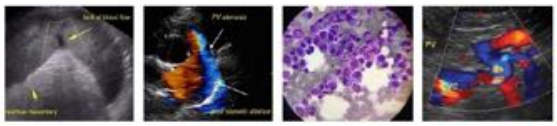


THE FOCAL ZONE
IMAGING PERFORMED BY
289-808-2608 info@thefocalzone.com

PATIENT

Jersey Gill

SPECIES

Canine

BREED

Pug Cross

SEX

Neutered male

AGE

12 years

WEIGHT

21.4 kg

INTERPRETED BY

Jessica Midence, DVM, DACVIM (SAIM)

IMAGING PERFORMED BY

Crystal Hill, RVT

HOSPITAL NAME

Beatties PH Stoney Creek

REFERRING VET

Dr. Mellish

INVOICE

42702

DATE

2/10/23

PRESENTING CLINICAL SIGNS

History: Overall doing well for age and clinical history. Last year had a splenectomy, liver mass removal and neuter due to testicular tumor. Did well post op all results came back pretty benign. Overweight, mild occasional lameness. Concerns for potential mass in abdomen with history and ongoing current anemia.
Abnormal PE/Chem/CBC/UA Results: CBC mild anemia, highly regenerative, sever ALKP elevation, moderate ALT elevation, mild Urea elevation. U/A 1.016 very dilute with proteinuria. T4 normal.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder mucosa, trigone, and visible urethra are normal in thickness and there is no evidence of mucosal irregularities. The bladder lumen is mildly distended with anechoic urine and bladder thickness is considered normal for volume of urine.

The prostate is enlarged and measured 1.82 x 3.05 cm with numerous, very small cysts. This is consistent with neutering late in life.

The left kidney is normal in size, shape and architecture with smooth peripheral margins and measures 5.99 cm. There is moderately decreased corticomedullary distinction and normal echogenicity. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter.

The right kidney is normal in size, shape and architecture with smooth peripheral margins and measures 6.3 cm. There is moderately decreased corticomedullary. distinction and normal echogenicity. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter.

Adrenal Glands

The left adrenal gland is normal in size at (cranial pole 0.62, caudal pole 0.69). The left adrenal gland has normal shape and it is normal in appearance and echogenicity.

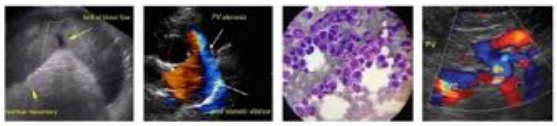
The right adrenal gland is at the high end of normal in size (0.78 cm at the cranial pole and 0.7 cm at the caudal pole). The right adrenal gland has normal shape and it is normal in appearance and echogenicity.

Spleen

The spleen is not present in this patient due to a previous splenectomy.

Liver

The liver is diffusely enlarged, but maintained relatively normal echotexture. The liver had a large, hyperechoic mass that measured 5.0 x 5.9 cm in certain views. The mass borders the diaphragm and it appears to bulge the contour of the liver as well as surrounding vasculature. The mass is homogenous in its echotexture and the borders are distinct, mostly irregular and round. In certain images, though not all, two additional hepatic nodules adjacent to the mass can be seen and have slightly indistinct borders, although the echotexture appears similar to the mass, which raises concern for possible metastatic disease. There were no enlarged hepatic lymph nodes that were seen.



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The gallbladder contained a large volume of non-dependent echogenic debris. The cystic and common bile ducts are normal/not visible.

Gastrointestinal Tract

The gastric lumen is empty. The stomach wall is of normal wall thickness with some variability due to rugal folds. There is normal gastric wall layering. There are no masses or focal lesions observed and the pyloric outflow tract appears normal.

The visualized areas of duodenum, jejunum and ileum appear normal in thickness. The duodenum is normal with distinct wall layering. The remainder of the small intestines are normal with normal wall layering. The lumen of the small intestine was empty with no signs of ileus, obstruction or foreign material. . No focal lesions observed.

The section of colon are visualized with formed fecal material and gas shadowing distally.

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. The visible pancreatic duct was normal.

Peritoneum

Evaluation of the peritoneal cavity did not reveal any evidence of effusion, or subjective lymphadenomegaly. The omentum is of normal uniform echogenicity.

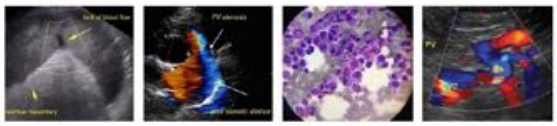
ULTRASONOGRAPHIC FINDINGS

Primary Findings

- Liver mass with nearby nodules. Hepatomegaly.
- Significant gallbladder sludge, both dependent and non-dependent.
- Chronic degenerative renal changes. Emerging renomegaly on the right side.
- Enlarged prostate with tiny cystic changes, consistent with late in life neutering.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The liver mass is quite large and has ill-defined borders and does bulge at the contour of the liver bordering the diaphragm. The mass could be benign or malignant (e.g. hepatocellular carcinoma, adenoma, round cell neoplasia, etc.), but there were two nearby nodules seen in only certain sonographic loops that had a similar echotecture to the mass and this raises concern for metastatic lesions. The mass can be aspirated at certain angles (it measured < 2.0 cm from the skin), but it is by the diarphagm, which makes it unlikely to be amenable to surgical removal. Despite the presence of this mass, unless the mass is of round cell origin (e.g. lymphoma, mast cell tumor or histiocytic sarcoma) it is unlikely to be related to the highly regenerative anemia, which suggests blood loss, hemolysis or



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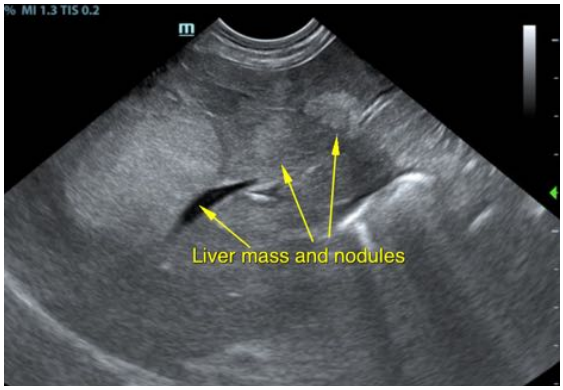
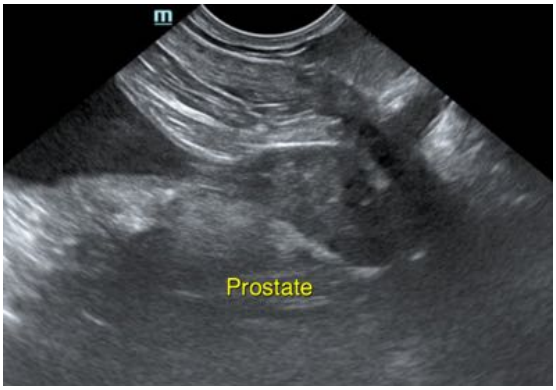
paraneoplastic anemia. Alternatively, given prior splenectomy, vector borne infections can be considered for the highly regenerative anemia.

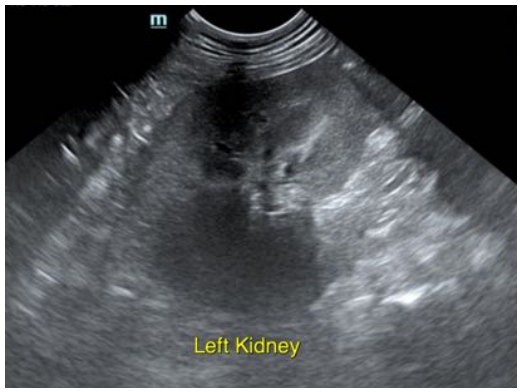
The right adrenal gland is measuring at the high end of normal range. There could be emerging adrenal hyperplasia/hyperadrenocorticism. This would explain the dilute urine and proteinuria as well as the significant gallbladder sludge, but would not explain the anemia. Consider Ursodiol therapy in this patient.

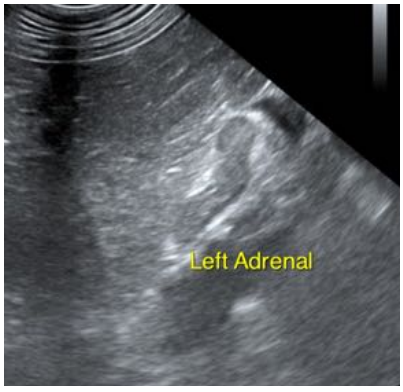
There are chronic changes to the kidneys that could also explain the dilute urine and proteinuria. Consider a urine protein to creatinine ratio and blood pressure as well as institute therapy if indicated.

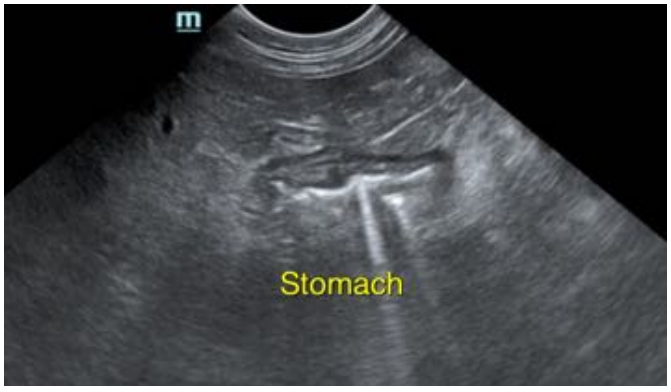
The changes to the prostate are considered normal for the patient as he was neutered late in life.











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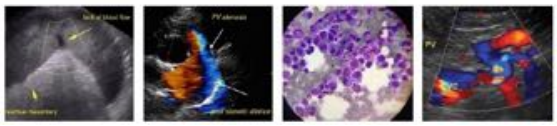

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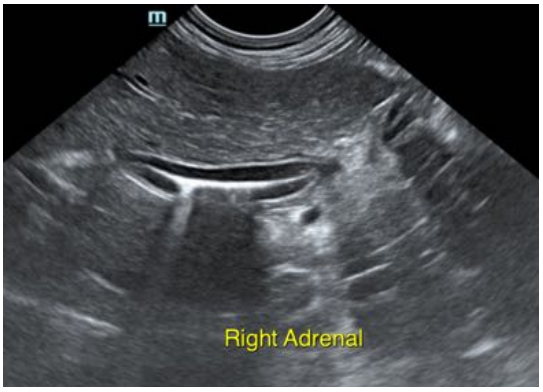

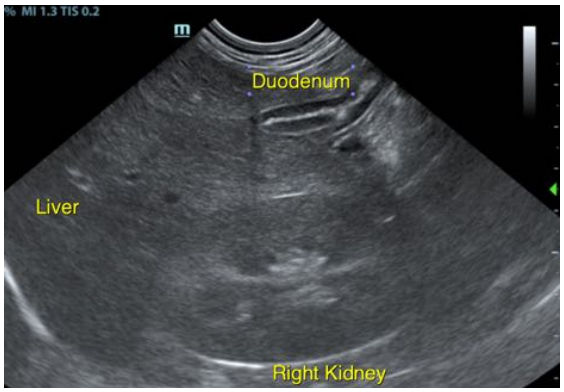

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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

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