



PATIENT

Zack Hunter

SPECIES

Canine

BREED

West Highland White
Terrier

SEX

MN

AGE

14y

WEIGHT

9.25kg

INTERPRETED BY

R. McKenzie Daniel,
DVM, DABVP
(Canine and Feline)

**IMAGING
PERFORMED BY**

Donna Markland
DVM

HOSPITAL NAME

Island Mobile Paws
Veterinary Service

REFERRING VET

Mahalo Veterinary
Hospital

INVOICE

11089ag

DATE

07/10/2022

PRESENTING CLINICAL SIGNS

History: Acute change in behaviour with tentative walking for about one week. Very high ALP noted with many transitional cells in urine. Suspected TCC. Physical exam unremarkable. Zack also has a history of recurrent pancreatitis and diarrhea/suspected IBD.

Abnormal PE/Chem/CBC/UA Results: Values not given. Very high ALP Large numbers of transitional cells in urine.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder exhibited normal thickness and tone. Anechoic urine was present in the lumen with minor particulate sediment. A nonhomogeneous mass occupying the urinary bladder neck and proximal urethral lumen extending into the area of the residual prostate measuring 2.9 cm x 0.82 cm was present. The ureteral papillae were normal. The ureters were not visible which is normal.

Normal size and margination was present in the kidneys. A normal 1:3 cortex / medulla ratio was maintained. The medulla and cortices were uniform in texture with some increased echogenicity and mild loss of corticomedullary symmetry and definition expected for the age of the patient. No evidence of pelvic dilation was present. Bilateral areas of pinpoint medullary mineral were noted. The left kidney measured 5.0 cm in length. The right kidney measured 4.8 cm in length.

The area of the aortic trifurcation was free of pathology.

Several variably prominent yet hypoechoic nonhomogeneous medial iliac lymph nodes were noted dorsal and slightly cranial to the urinary bladder in the area of the iliac trifurcation.

The residual prostate was mildly enlarged exhibiting asymmetrical contour. Nonhomogeneous to mixed echogenic residual prostate parenchyma exhibiting intraparenchymal cysts and areas of mineralization were noted. The residual prostate measured 3.2 cm x 1.9 cm.

Adrenal Glands

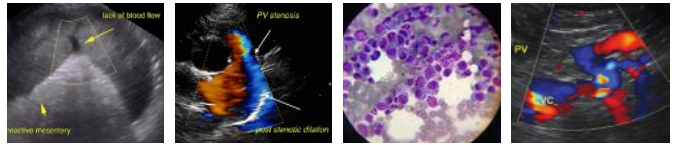
The left adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 0.45 cm width at the caudal pole and 0.46 cm width at the cranial pole. The right adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The right adrenal gland measured 0.57 cm width at the caudal pole.

Spleen

The spleen exhibited primarily finely textured parenchyma which was hyperechoic to the liver and renal cortical parenchyma. Mild generalized parenchyma heterogeneity was present without evidence of nodular changes. The capsule was smooth and regular without apparent expansion. The splenic vasculature at the hilus was normal in volume with no evidence of congestion or thrombosis. The parenchymal heterogeneity is likely consistent with benign changes such as extramedullary hematopoiesis or age-related remodeling with minor potential for inflammatory or neoplastic disease.

Liver

The liver presented enlarged in size. The parenchyma exhibited mild remodeling. A solitary nondisruptive nonhomogeneous mildly hyperechoic intraparenchymal nodule noted dorsal to the gallbladder measuring 1.9 cm in diameter. The liver parenchyma was uniform with a mildly coarse echotexture. The capsule of the liver was symmetrically rounded to mildly swollen in margination. The hepatic and portal vasculature were normal in appearance without signs of congestion. The gallbladder was non-distended



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in size with primarily anechoic luminal content and moderate nonorganized hyperechoic debris. The cystic and common bile ducts were normal.

Gastrointestinal

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The stomach presented intact wall layering with a normal wall layer ratio. The lumen of the stomach was empty with no signs of ileus, obstruction or foreign material.

The small intestine presented intact wall layering with 1:3 muscularis/mucosa ratio. The lumen of the small intestine was empty with no signs of ileus, obstruction or foreign material.

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Normal visible colon wall layers were present with apparent formed feces in lumen.

Pancreas

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The parenchyma of the left limb, body and right limb of the pancreas presented isoechoic to the adjacent omental fat. A normal curvilinear capsule contour of the pancreas was present. The visible pancreatic duct was normal. No signs of active inflammation or neoplastic disease was evident.

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Free Abdomen

Evidence of perilymphatic reactive mesentery was noted.

Several variably prominent yet hypoechoic non-homogeneous medial iliac lymph nodes were noted dorsal and slightly cranial to the urinary bladder in the area of the iliac trifurcation. An example of a medial iliac lymph node measured 2.8 cm x 1.0 cm.

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ULTRASONOGRAPHIC FINDINGS

- Irregular mildly prominent residual prostate with intraparenchymal cyst and mineralization
- Urinary bladder neck and proximal urethral mass
- Prominent to hypoechoic medial lymphadenopathy with evidence of pinpoint mineralization
- Bilateral chronic renal changes with pinpoint medullary mineral
- Vacuolar hepatopathy pattern with nonspecific likely benign intraparenchymal nodule-suggestive of probable lipogranuloma
- Moderate gallbladder debris (non-mucocele)
- Overtly normal GI tract

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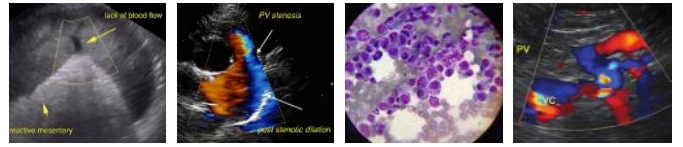
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INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The urinary bladder neck and proximal urethral mass is consistent with neoplastic criteria and likely involving the residual prostate. Transitional cell carcinoma is considered a primary differential diagnosis. A screening BRAF assay could be considered. Although sampling is required for further assessment the medial iliac lymph nodes are strongly suggestive of neoplastic lymphadenopathy given this presentation. An ultrasound guided FNA of a medial iliac lymph node for screening cytology could be considered. Surgical options are likely precluded.



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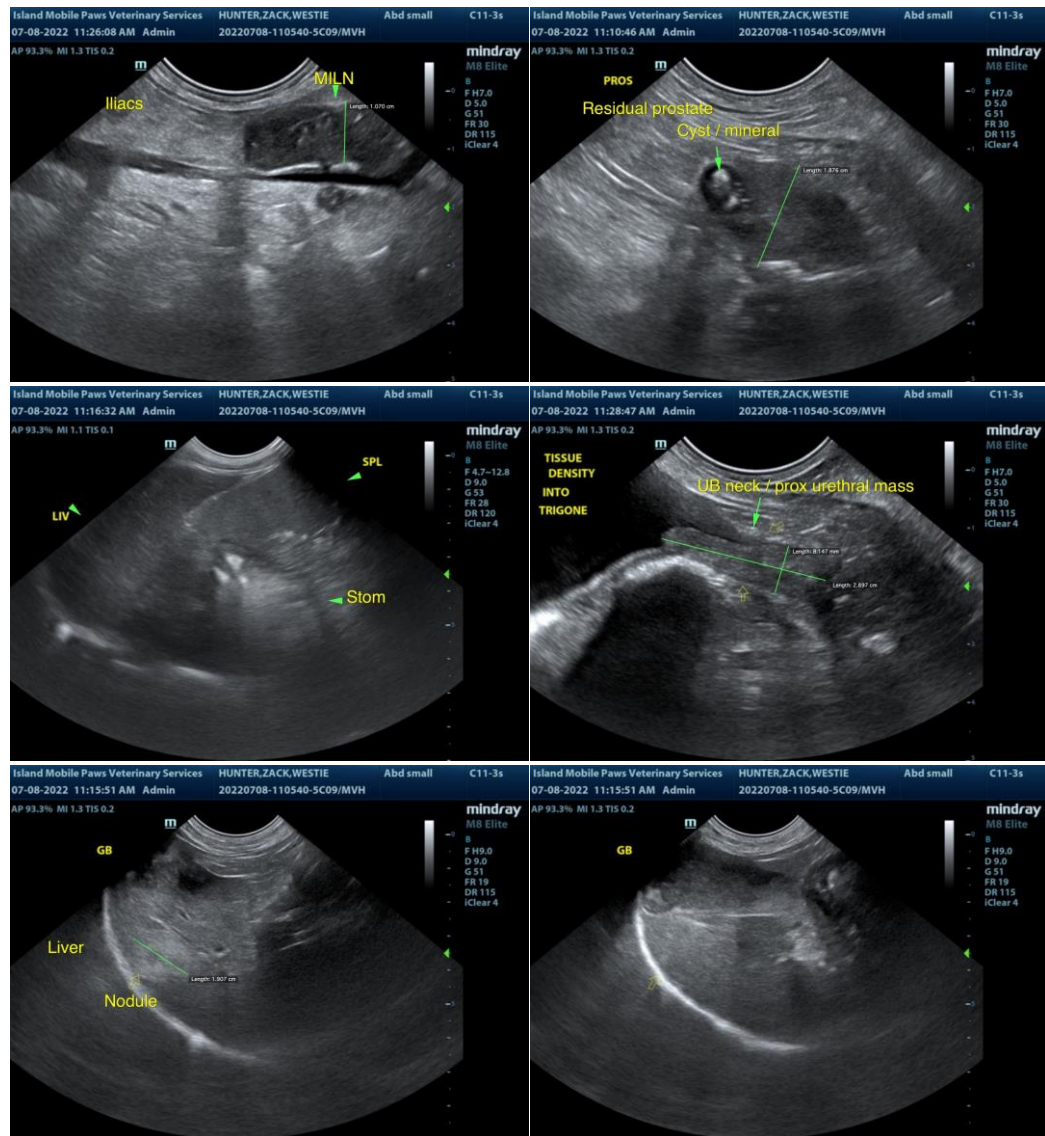
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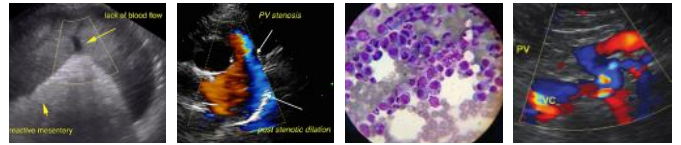
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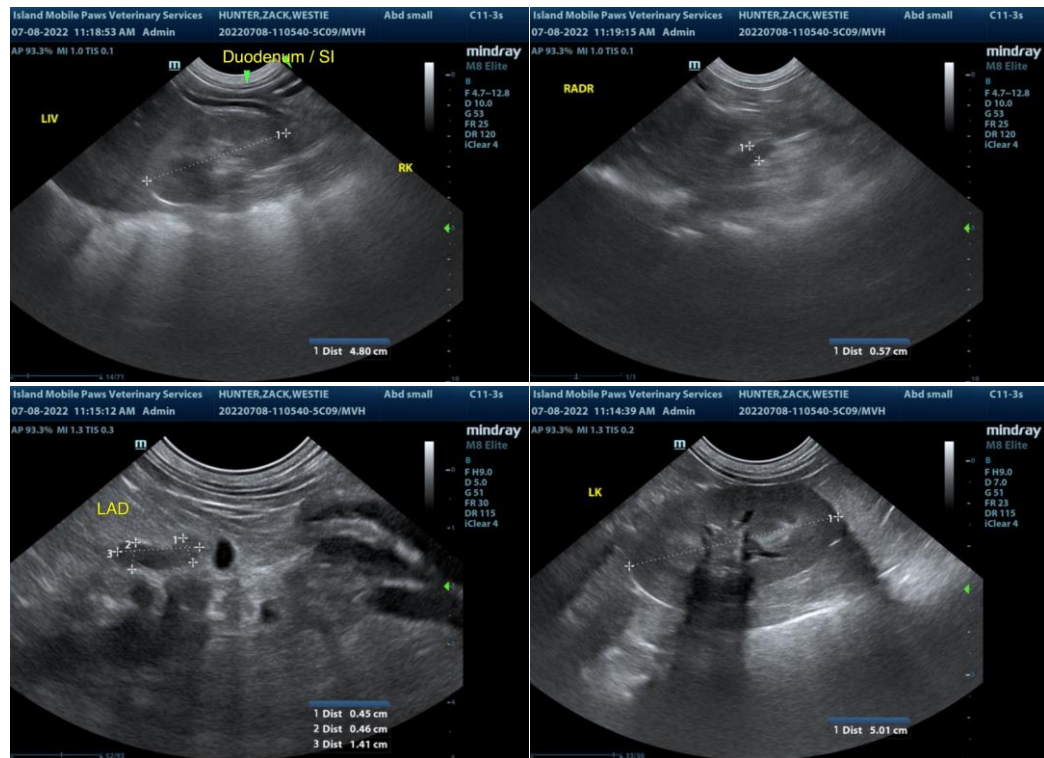
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

R. McKenzie Daniel, DVM, DABVP (Canine / Feline Practice)

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