



**PATIENT**

Prince Gruwell

**SPECIES**

Canine

**BREED**

Pit Bull

**SEX**

MN

**AGE**

9 years

**WEIGHT**

68.4 lbs.

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Sara Hansen

**HOSPITAL NAME**

The Ark Veterinary  
Clinic

**REFERRING VET**

Dr. Mercer

**INVOICE**

17182

**DATE**

6/28/23

**PRESENTING CLINICAL SIGNS**

EENT: MM pink, moist. CRT <2 seconds. Clear OU, Clean AU. Nares free of any discharge. INTEGUMENT: No external parasites observed. Crusting erythema and calcium cutis noted along the back and flanks. Calcium cutis/ erythema starting to form at the temples. LYMPH NODES: Lymph nodes are small and of normal texture CIRCULATORY: No murmur or arrhythmia ausculted. Femoral pulses are strong and synchronous. RESPIRATORY: Eupneic. Slightly increased lung sounds both sides. Slight cough on tracheal palpation. DIGESTIVE: Abdomen soft/benign. No masses palpated. GENITOURINARY: No significant findings. MUSCULOSKELETAL: Ambulatory x all 4. NEURO: No neurologic deficits noted at this time.

Abnormal PE/Chem/CBC/UA Results: Calcium Cutis Cushing (pending adrenal versus pituitary) - Skin is continuing to improve on antibiotics and shampooing. Owner to continue DMSO after most the dried scabbed is removed. Hindlimb weakness - Arthritis (Previous diagnosis of ACL tear on the LHL never fixed) - Degenerative Myelopathy - Muscle Weakness Current Medications Cefpodoxime 200mg, 1 SID. Thyroid tabs 0.7mg, 1 SID

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**Urinary System**

The urinary bladder, trigone, and cystourethral junction exhibited normal thickness and tone. Anechoic urine was present in the lumen with no uroliths or sediment. The ureteral papillae were normal. The ureters were not visible which is normal. No evidence of inflammatory or neoplastic changes was noted.

The residual prostate was free of overt pathology.

The area of the aortic trifurcation was free of pathology.

Normal size and margination were 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. The left kidney measured 8.8 cm in length. The right kidney measured 9.2 cm in length. Pinpoint medullary mineral was noted in both kidneys.

**Adrenal Glands**

The left adrenal gland was overtly normal in size, position, and shape. The left adrenal gland measured 0.47 cm width at the caudal pole and 0.38 cm width at the cranial pole. A nonhomogeneous, potentially pinpoint mineralized mass was present in the area of the right adrenal gland measuring ~4.1 cm x 2.6 cm. There was no obvious evidence of vascular invasion associated with the mass in the area of the right adrenal gland, although it cannot be excluded.

**Spleen**

The spleen exhibited primarily finely textured and homogenous parenchyma which was hyperechoic to the liver and renal cortical parenchyma. Multifocal, hyperechoic nodules were present throughout



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the cranial to caudal parenchyma with an example measuring 0.73 cm diameter. Within the cranial spleen, a mildly expansive, nonhomogeneous, cystic-appearing mass was present measuring approximately 4.0-5.0 cm in diameter with suspect concurrent solid homogeneous mass in the cranial spleen measuring 3.0 cm in diameter. The mass to masses mildly distorted the associated regional splenic capsule without overt evidence of rupture or parenchymal escape. The splenic vasculature at the hilus was normal in volume with no evidence of congestion or thrombosis.

**Liver/ Gallbladder**

The liver presented enlarged in size. The liver parenchyma exhibited normal to mild uniform increased parenchyma echogenicity 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 exhibiting normal appearance to the gallbladder wall without evidence of inflammatory criteria. The gallbladder contained anechoic content with moderate, dependent, mildly congealed yet nonorganized hyperechoic to mildly mineralized gallbladder sediment. No evidence of peripheral inflammation was noted. The cystic and common bile ducts were normal.

**Gastrointestinal**

The stomach presented a sonographically normal visualized gastric wall. The lumen of the stomach contained mild ingesta exhibiting strong distal acoustic shadowing.

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.

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

**Pancreas**

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 were evident.

**Free Abdomen**

No overt lymphadenopathy or peritoneal effusion was present.

Rapid view of the heart revealed no evidence of pericardial masses or effusion in the visible window.

**ULTRASONOGRAPHIC FINDINGS**

- Splenic mass / masses with concurrent multifocal, hyperechoic nodules
- Hepatomegaly - subjectively benign
- Moderate hyperechoic to mineralized gallbladder sediment (non-mucocele)
- Right adrenal mass



**PATIENT**

- Mild chronic renal changes
- Strongly shadowing gastric ingesta

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**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

The right adrenal mass is suggestive of neoplastic criteria with potential for benign hyperplasia or functional adenomatous change. There was no overt evidence of regional metastasis or overt vascular invasion, although cannot be definitively excluded.

The hyperechoic splenic nodules are sonographically consistent with myelolipomas, or possible emerging mineralization sometimes seen with endocrine disease. The splenic mass to masses were nonspecific with both benign vs. neoplastic etiologies possible. Assuming no evidence of pathology on three-view chest radiographs, abdominal CT for further assessment of the right adrenal gland, assessment for nonobvious metastasis associated with the right adrenal mass, and splenic masses, as well as surgical planning, is recommended.

The strongly shadowing gastric ingesta is nonspecific and may indicate dense ingesta, medication, treat, or similar. Technically, the possibility of nonobstructive gastric foreign material cannot be excluded. Sonographic monitoring of the stomach is suggested if documented NPO.

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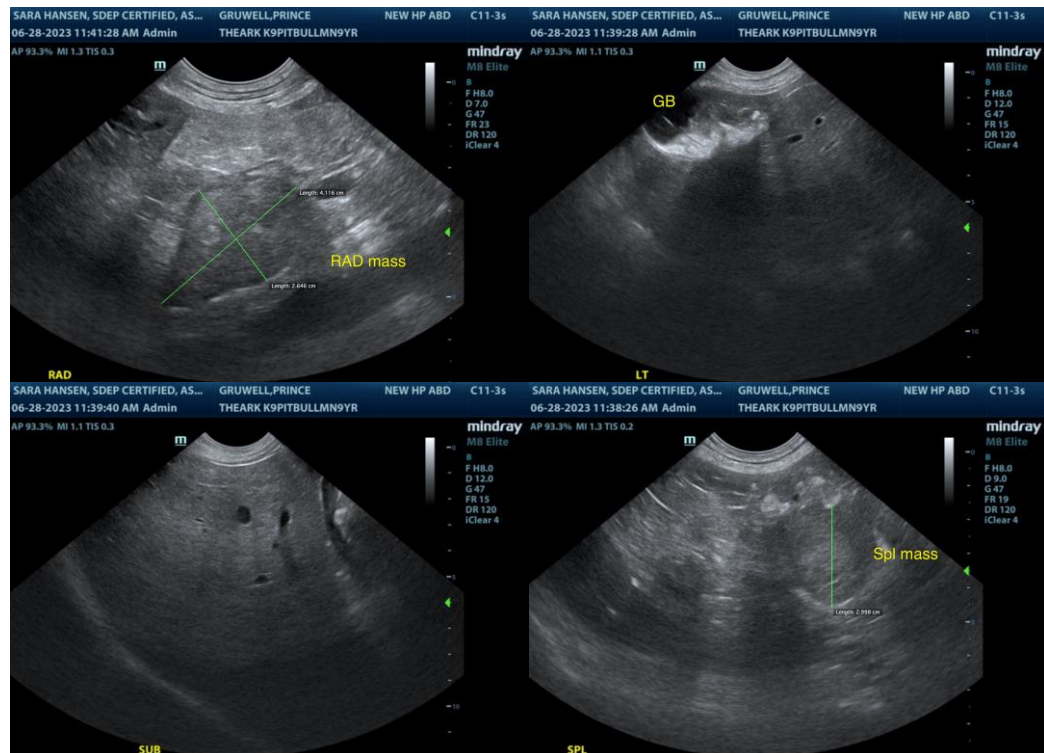
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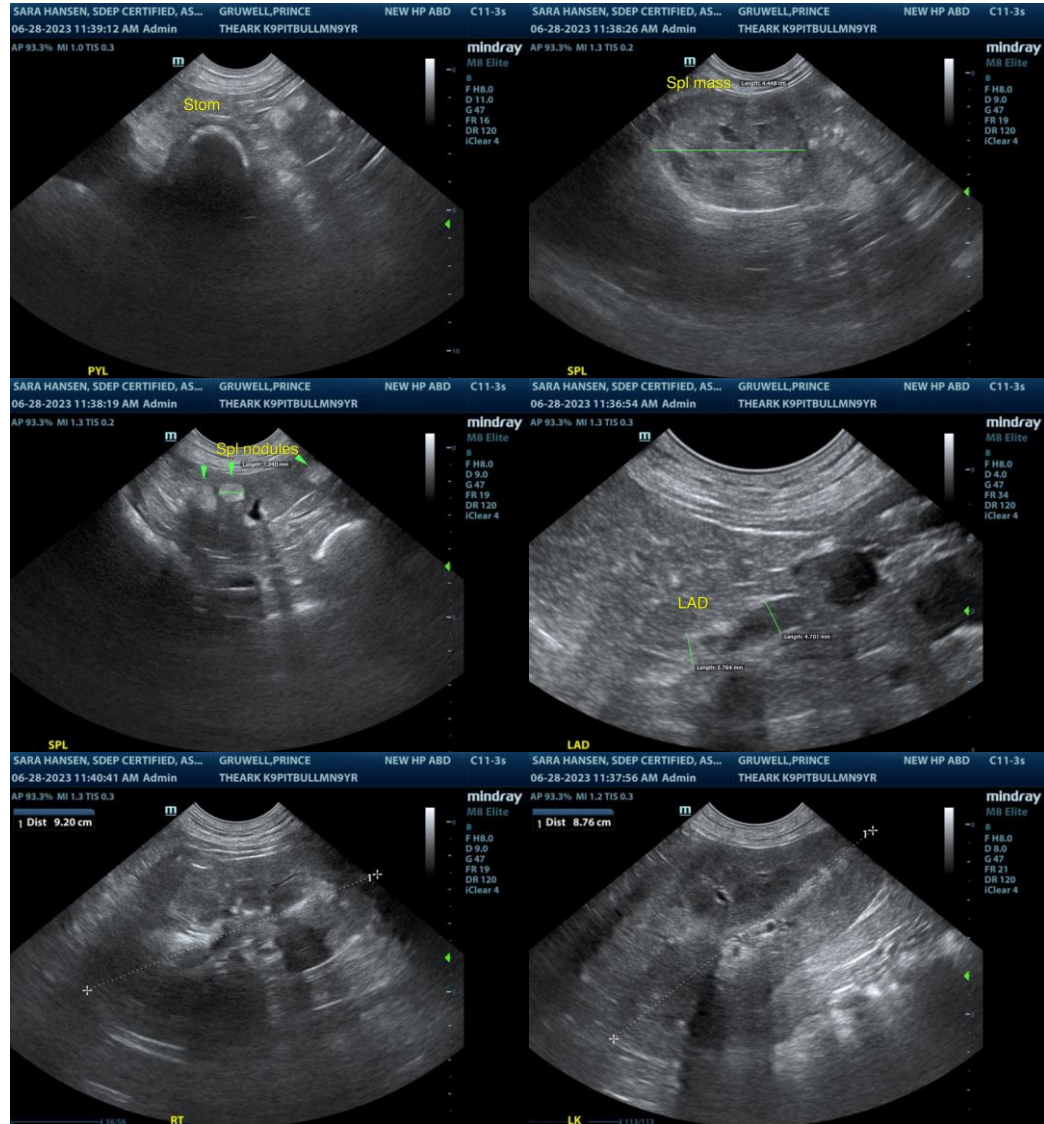
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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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