

**DATE**

9/28/21

PRESENTING CLINICAL SIGNS

History: Presenting Complaint: Anemia; Mass/Swelling – Spleen.

rDVM - abdominal mass on xrays; Referred for potential splenectomy; PCV - 17%. On Trilostane for Cushing's. Assessment: r/o splenic mass (malignant vs benign); other abdominal mass; heart. Plan: Start w/bicavity ultrasound; admit to hospital for IV fluids; +/- blood transfusion, splenectomy. Physical Exam: mm - pale; HR - 150; RR - 48; moderately painful to cranial abdominal palpation.

Current Medications: Trilostane.

Lab Results: Chemistry and Elect. WNL; mild leukemia; anemia (HCT 17%; RBC 2.3; HGB 6).

Radiographs: FAST scan of chest showed potential abnormalities in ventricle (fibrin). rDVM - abdominal mass on xrays.

Date of Previous IntraPet Ultrasound: No previous IntraPet scans.

Sedation: Acepromazine and Torbugesic.

Stat Report: Declined.

PATIENT

Cash Dog Roslan

SPECIES

Canine

BREED

Pitbull Mix

SEX

Neutered male

AGE

4/22/11

WEIGHT

33.2 lbs

INTERPRETED BY

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DVM, MS, Diplomate
ACVIM (Small Animal
Internal Medicine)

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**Urinary System**

The urinary bladder is moderately distended with mildly echogenic urine. The bladder wall, trigone, ureteral papillae and visible urethra (to a depth of 2cm) appear normal with no evidence of wall thickening, mucosal irregularities, masses or cystic calculi.

The prostate is normal in size (0.94 cm) and shape for this neutered male dog. The parenchyma is homogenous and the external margins are smooth. The prostatic urethra appears normal with no evidence of irregularity, invasion, mass effect or calculi.

The left kidney has a normal shape and size (5.86 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The right kidney has a normal shape and size (5.45 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

HOSPITAL NAME

Animal Emergency
Hospital

Adrenal Glands

The left adrenal gland is large in size measuring 1.01 cm at the caudal pole It is observed in its normal position cranial to the left renal artery. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

REFERRING VET

Dr. Marinoli

The right adrenal gland is normal/large in size measuring 0.81 cm at the caudal pole It is observed in its normal position between the cranial aspect of the right kidney and the caudal vena cava. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

INVOICE

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Spleen

The spleen is subjectively normal in size, echotexture is homogenous, and mildly folded. The blood flow through the hilus and splenic parenchyma appears normal. No focal parenchymal abnormalities are visualized.

Liver

The liver is subjectively normal in size, and echogenicity with smooth peripheral margins. The parenchyma is heterogenous in echotexture with subtle, indistinct focal mottling. The visible portions of the vasculature and biliary tract appear normal. No focal nodules or cystic lesions are observed. The gallbladder lumen is moderately distended. The wall of the gallbladder is not thickened and has a smooth mucosal surface. There is a moderate amount of non-organized echogenic debris. The cystic and common bile ducts are normal/not visible.

Gastrointestinal

The stomach is moderately dilated with fluid and irregular shadowing material most consistent with normal ingesta and gas. It measures at a normal thickness of <0.7cm with some variability due to the presence of rugal folds. The distinction of the gastric wall layering is adequate and there is no impression of reduced peristaltic activity. No masses or focal lesions were observed.

The visualized areas of duodenum, jejunum and ileum have a relatively uniform diameter with minimal fluid distension. Wall thickness is normal. Bowel loops follow a curvilinear path with distinct wall layering maintaining the typical 1:3 muscularis:mucosa layer ratio. The duodenum measured as normal and the jejunum measured as normal (0.39 cm). Visualized peristalsis appears appropriate. There were no focal lesions consistent with obstruction or a mass effect observed.

The ileocecal junction was visualized and exhibited normal intact wall layering and is subjectively of normal thickness. Sections of colon are visualized with formed fecal material and gas shadowing distally. There is no observed focal or generalized colon wall thickening or loss of layering.

Pancreas

The pancreas is prominent and mottled compared to the surrounding isoechoic mesentery. The pancreatic duct is prominent. There is no evidence of nodules or cystic lesions. There is no evidence of regional mesenteric inflammation or fluid.

Free Abdomen

Evaluation of the peritoneal cavity did not reveal any evidence of effusion, or subjective lymphadenomegaly. The Medial iliac nodes appear normal and there was no evidence of a caudal aortic thrombus at the bifurcation. The omentum is of normal uniform echogenicity.

Heart

A brief view of the heart was submitted. No pericardial effusion was seen.

ULTRASONOGRAPHIC FINDINGS

PRIMARY FINDINGS:

- Bilateral adrenomegaly. The bilateral adrenomegaly could be consistent with bilateral hyperplasia (e.g., secondary to pituitary-dependent hyperadrenocorticism), bilateral infiltrative neoplasia, inflammatory adrenal disease, other. Correlation with clinical findings is recommended. This is consistent with the diagnosed Cushing's disease.
- Prominent, mottled pancreas with prominent pancreatic duct. The pancreatic changes are most consistent with mild pancreatitis/pancreatic infiltration. I recommend fPLI testing and continued monitoring for improvement or possible development of a pancreatic abscess. Consider FNA if not

improving.

- Heterogenous liver. The diffuse hepatic changes are non-specific and could be consistent with vacuolar hepatopathy, nodular hyperplasia, inflammatory/immune-mediated disease, fibrosis, extramedullary hematopoiesis, toxic hepatopathy (e.g., copper), infiltrative neoplasia (less likely) or other hepatopathy.
- Large amount of hard shadowing material within the gastric lumen. Correlate with feeding history. This may be consistent with recent meal or foreign material.

SECONDARY FINDINGS:

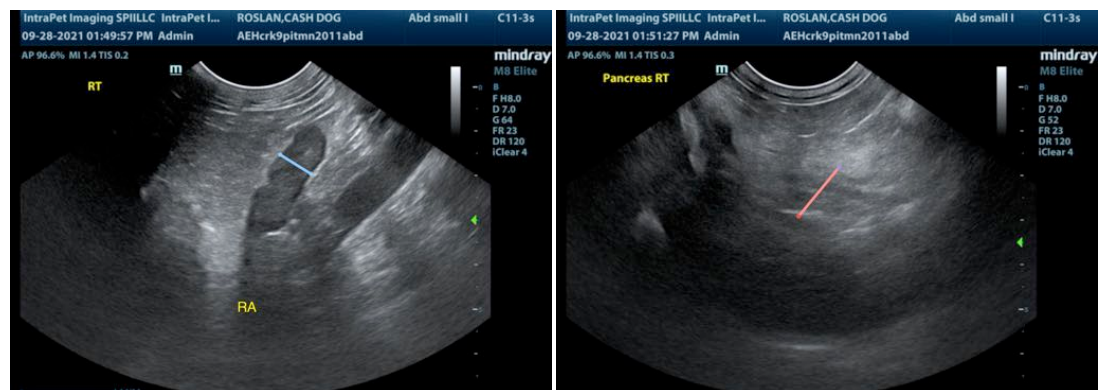
- Mildly echogenic debris in the urinary bladder.
- Moderate gallbladder debris. The significance of the aggregated gallbladder debris is unclear. This could represent an early mucocele, cholestasis, or may be secondary to fasting.

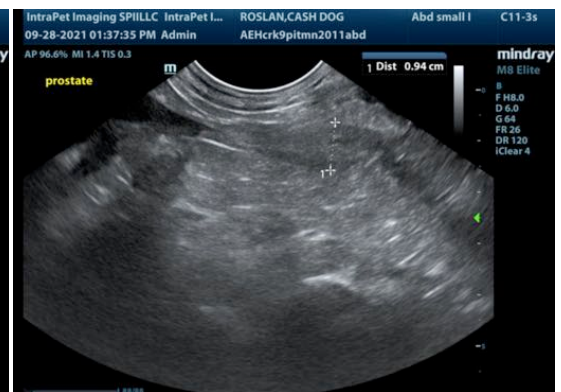
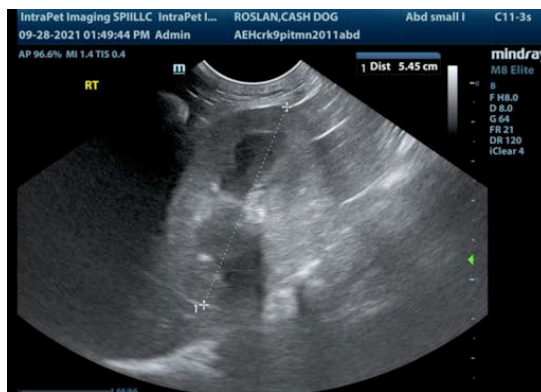
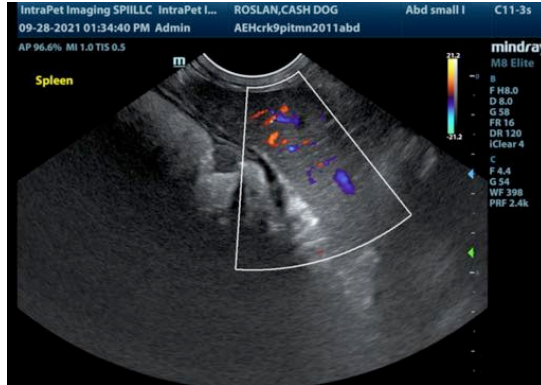
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

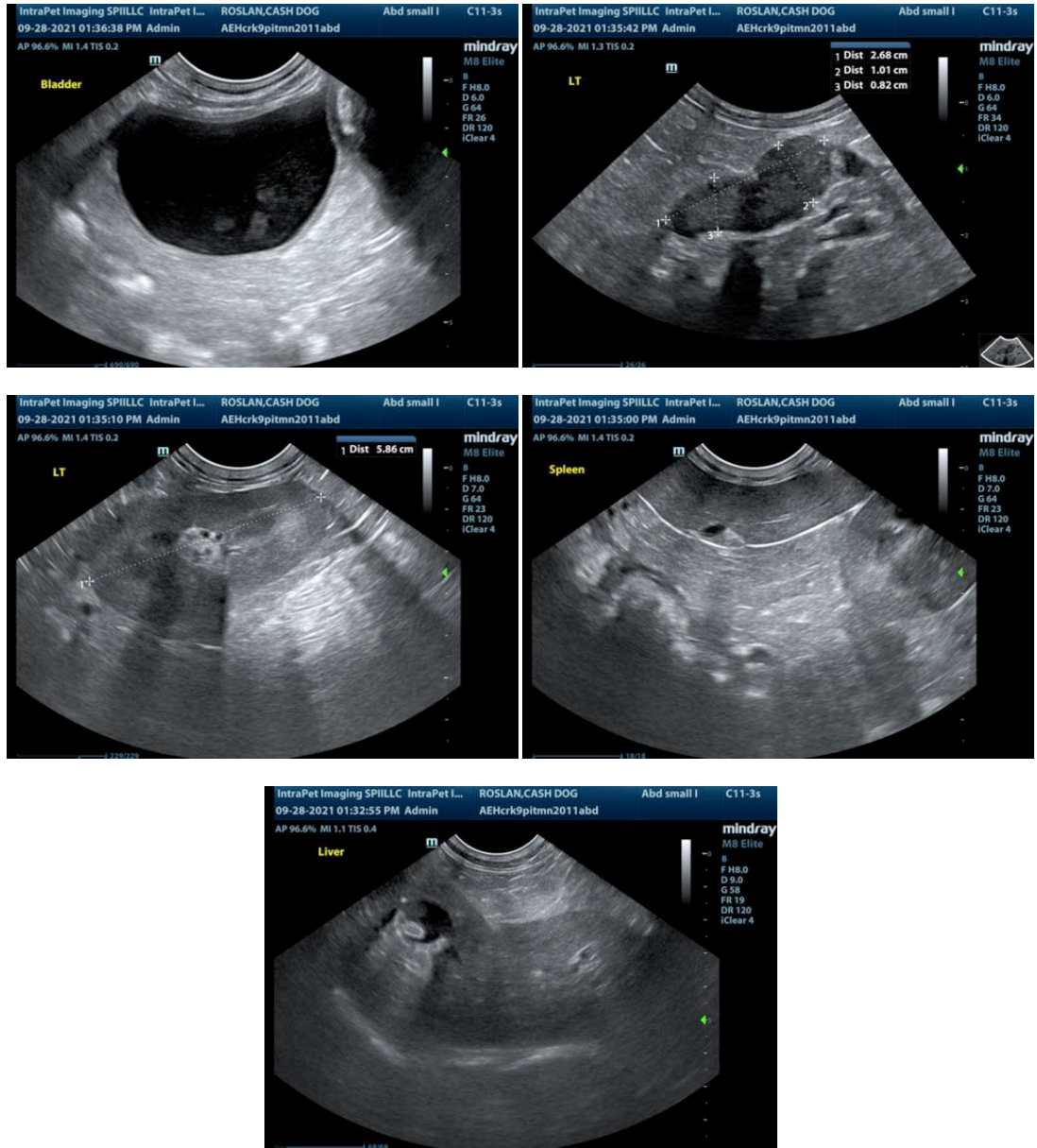
No discrete masses were observed in the liver or spleen and no free fluid was observed. This is not consistent with a hemoabdomen. I recommend to continue evaluation for the anemia with blood loss being a much less likely differential (provided there is no melena present).

The pancreas is somewhat prominent and uncomfortable at the time of the scan. Consider a PLI evaluation. The distended abdomen may be due to Cushing's disease and possible pancreatitis.

- Recommend CBC with path review and reticulocyte count to look for atypical cells, parasites, etc
- Recommend tick borne testing with Babesia and Bartonella
- If non-regenerative anemia is present consider bone marrow evaluation
- If hemolysis is evident and spherocytes, autoagglutination, etc consider treating for autoimmune disease.







The information and recommendations provided are based on the images presented by the referring veterinarian. 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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