



PATIENT

Luna Moore

SPECIES

Canine

BREED

Portugese Water Dog

SEX

Canine

AGE

10 Years

WEIGHT

37 Pounds

INTERPRETED BY

Beth Johnson, DVM
DACVIM

IMAGING PERFORMED BY

Adrienne Waffle

HOSPITAL NAME

Torch Lake VC

REFERRING VET

Dr. Raddatz

INVOICE

42352

DATE

10/26/22

PRESENTING CLINICAL SIGNS

RDVM would like to R/O foreign body vs abdominal mass
Abnormal PE/Chem/CBC/UA Results: Neutr - 14.48 CorrCA - 13.4 TP - 5.1 ALB -- 2.0 Glob - 3.1 AST - 71 ALP - 318 AMY - 1541 Lipase >1000 Patient lethargic; pale pink MM; Painful in both R cranial quadrant as well caudal mid abdomen

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

Urinary bladder is adequately distended. It has a normal uniform wall thickness. Contents include primarily anechoic fluid with occasional echogenic non-shadowing debris, most consistent with exfoliated cells, mucous and/or small blood clots. Both sterile inflammation as well as urinary tract infection can also present with echogenic debris. No masses or cystoliths are observed. The trigone and visible pelvic urethra are normal in thickness with a smooth mucosal surface.

The right kidney is normal in size (5.77 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed.

The left kidney is normal in size (5.78 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed.

Adrenal Glands

The area of the right adrenal gland is examined without evident pathology.

The area of the left adrenal gland is examined without evident pathology.

Spleen

Spleen is subjectively large in size with normal smooth margins. Parenchyma is normal in echogenicity with a coarse/heterogenous echotexture. No focal nodules or masses are observed. The splenic vein is dilated with echogenic densities within the lumen of the vessel, consistent with possible thrombus or even tumor seeding, which can be seen with aggressive lymphoma.

Liver

Liver is markedly enlarged (swollen contour). Mild parenchymal remodeling with diffusely mildly coarse architecture and increased portal markings is present. No focal nodules or masses are observed. Visible vasculature and biliary tree appear normal without distension or congestion. Enhanced mesenteric fat is noted around the liver and between liver lobes.

The gallbladder is non-distended in size. The wall is smooth without visible thickening. Luminal contents are primarily anechoic. There is no evidence of cystic or common bile duct dilation.

Gastrointestinal

The visible stomach wall is normal in thickness and layering. The lumen of the stomach is mildly distended with very echogenic reverberation artifact from intraluminal gas. There is no evidence of obstruction, foreign material or infiltrative disease; however, complete visualization of far wall is partially inhibited by gas. Pyloric outflow tract appears patent.

The visible small intestines are normal in wall thickness and layering (canine duodenum < 0.5 cm and feline duodenum < 0.4 cm; other < 0.3 cm), except in the mid abdomen, where there is a focal bowel



PATIENT	mass characterized by complete loss of normal layering and a thick, hypoechoic wall surrounded by clumped, adhered, enhanced mesentery and free fluid. Small intestinal motility appears adequate (1-3 contractions per min). The lumen of the small intestine is empty with no evidence of obstruction, foreign material or infiltrative disease.
Luna Moore	
SPECIES	The visible colon is normal in wall thickness (< 0.2 cm) and layering. Contents are consistent with normal formed feces and gas.
Canine	
BREED	Pancreas
Portugese Water Dog	The pancreatic parenchyma is appropriately isoechoic to surrounding tissue. Visible capsule is smooth and normal in contour. There is no visible pancreatic duct dilation. There is no evidence of active peripancreatic inflammation.
SEX	Free Abdomen
Canine	A large amount of echogenic appearing free fluid is present.
AGE	Lymph nodes in the cranial abdomen around the liver are enlarged with swollen irregular capsular contour and loss of normal length to width ratio (rounded in shape). Nodes are hypoechoic with loss of normal parenchymal detail.
10 Years	
WEIGHT	PRIMARY FINDINGS
37 Pounds	<ul style="list-style-type: none"> • Coarse splenomegaly – can be associated with congestion caused by sedation (if sedated) but can also be associated with diffuse infiltrative disease. Both benign conditions such as extramedullary hematopoiesis, lymphoid hyperplasia, as well as infiltrative neoplastic diseases such as round cell neoplasia should be considered.
INTERPRETED BY	<ul style="list-style-type: none"> • Suspected thrombus or tumor spread into the splenic vein – This is a finding that can be seen with aggressive lymphoma. • Hypoechoic hepatomegaly – This appearance is consistent with an acute hepatopathy or acute cholangiohepatitis. Infiltrative neoplasia (round cell neoplasia) should also be considered.
Beth Johnson, DVM DACVIM	
IMAGING PERFORMED BY	<ul style="list-style-type: none"> • Small bowel mass – Concerning for infiltrative neoplasia, especially lymphoma, given the concurrent pathology.
Adrienne Waffle	
HOSPITAL NAME	<ul style="list-style-type: none"> • Free fluid and enhanced mesenteric fat – Concerning for focal peritonitis, and even rupture cannot be definitively ruled out. • Aggressive lymph nodes – most consistent with infiltrative round cell or metastatic neoplasia. A benign aggressive inflammatory response cannot be ruled out without tissue sampling +/- culture.
Torch Lake VC	
REFERRING VET	SECONDARY FINDINGS
Dr. Raddatz	<ul style="list-style-type: none"> • Urinary bladder debris
INVOICE	INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS
42352	Sampling of the free abdominal fluid is recommended for STAT analysis to rule out a septic abdomen secondary to bowel mass rupture, which cannot be definitively ruled in/out based on ultrasound images.
DATE	Additionally, a fine needle aspirate of the bowel mass +/- the liver and/or enlarged lymph nodes is recommended if patient's coagulation status is appropriate.
10/26/22	



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Given this patient's concurrent hypercalcemia combined with the ultrasound pathology described above, aggressive, likely T-cell lymphoma is the top differential. If treatment is elected, then following obtaining diagnostic samples, and in addition to symptomatic/supportive care Prednisone therapy is recommended while awaiting results.

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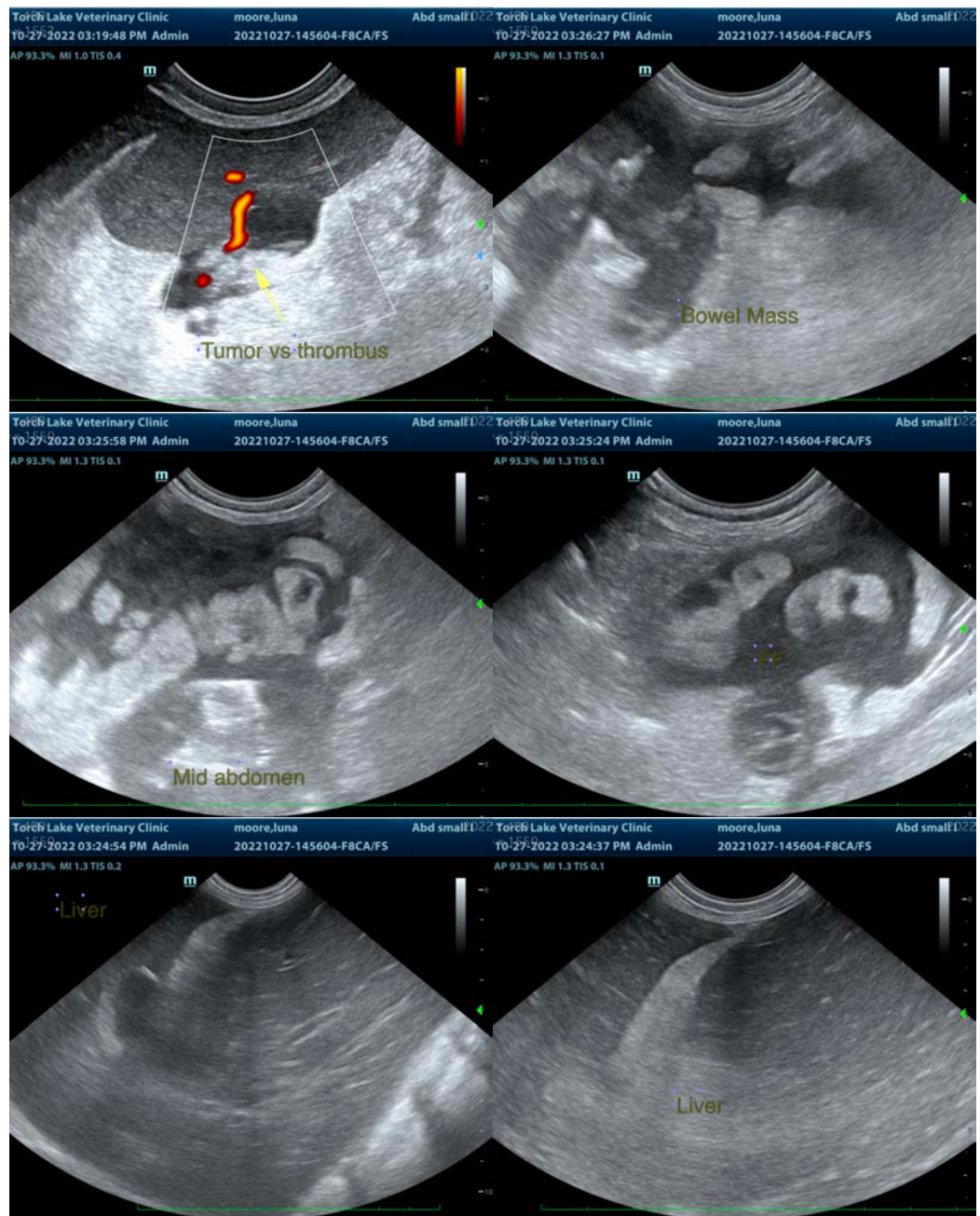
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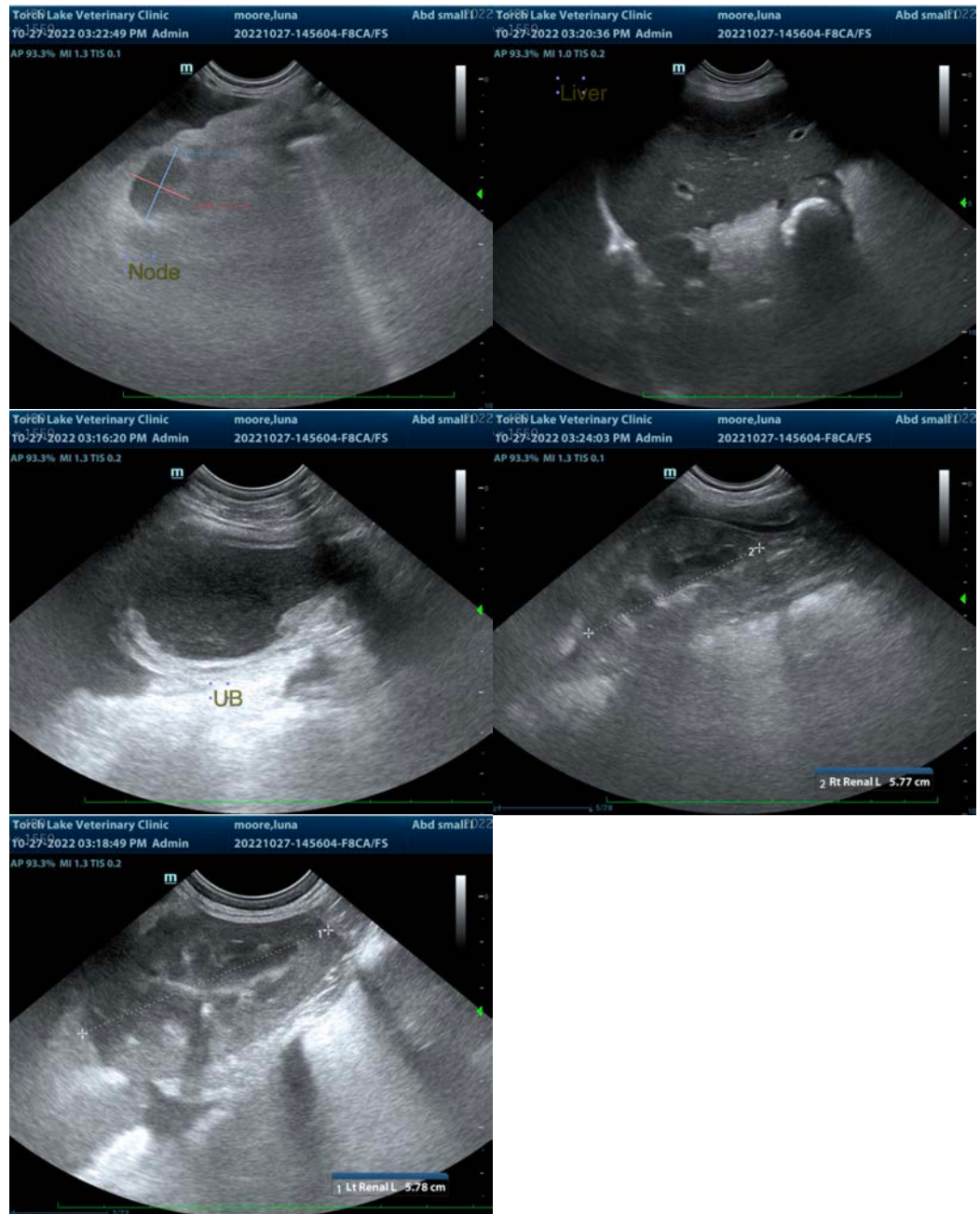
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

Beth Johnson, DVM, DACVIM
Beth.Johnson@sonopath.com