

DATE	PRESENTING CLINICAL SIGNS
10/10/22	History: S Pre-operative blood work revealed elevated BUN.
PATIENT	Current Medications: Clavamox Suspension 62.5mg/mL 15mL bottle. Give 0.55mL BID for 10 days. Dispensed on 10/4/22.
Gunner Kyger	Lab Results: Persistently elevated BUN, SDMA 19. USG 1.028, some bacteria in urine, no growth on culture.
SPECIES	Date of Previous IntraPet Ultrasound: No previous.
Feline	Sedation: Not required to complete full diagnostic ultrasound.
	Stat Report: Not requested.
	Imaging Performed By: Rachel Brillhart, RDMS.
BREED	ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN
DSH	Urinary System
SEX	Urinary bladder is adequately distended with anechoic contents. No masses, inflammatory changes, echogenic sediment or cystoliths are observed. The urinary bladder, trigone and visible pelvic urethra are normal in thickness with a smooth mucosal surface.
Intact Female	
AGE	The kidneys are overall normal in size and shape with smooth peripheral margination and a normal 1:3 cortex to medulla ratio. The left kidney measures 3.9 cm. The right kidney measures 3.77 cm. There is mild loss of corticomedullary distinction noted and a hyperechoic band parallel to the corticomedullary border is present bilaterally.
4/8/22	
WEIGHT	Adrenal Glands
6.2 Pounds	Left adrenal gland is normal in size (0.48 cm), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.
INTERPRETED BY	Right adrenal gland is normal in size (0.39 cm), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.
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HOSPITAL NAME	Spleen
Warm & Fuzzy Vet	Spleen is generally normal in size and shape with a smooth capsular contour. Parenchyma is diffusely nodular in appearance characterized by small discrete hypoechoic nodules. Splenic vasculature appears normal.
REFERRING VET	Liver
Dr. Urie	Liver is subjectively normal in size with normal smooth curvilinear peripheral contour. Parenchyma is appropriately hypoechoic to the spleen in echogenicity and appropriately mildly coarse and homogenous in echotexture. No focal lesions are observed. Visible vasculature and biliary tree appear normal without distension or congestion.
INVOICE	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.
17639	Gastrointestinal
	The visible stomach wall is normal in thickness and layering. The lumen of the stomach is empty with no evidence of obstruction, foreign material or infiltrative disease. Pyloric outflow tract appears patent.

The visible small intestines are normal in wall thickness and layering. 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.

The visible colon is normal in wall thickness and layering. Contents are consistent with normal formed feces and gas.

Pancreas

The pancreas is visible, characterized by mildly hypoechoic parenchyma compared to surrounding tissue, however, the visible capsule is smooth and normal in contour. Pancreatic parenchyma is homogeneous and unremarkable. There is no visible pancreatic duct dilation and no evidence of active peripancreatic inflammation.

Free Abdomen

There is no free fluid.

The mesenteric lymph nodes are prominent in size with swollen capsular contour. Normal elongated shape (length to width ratio) is maintained. There is no loss of parenchymal detail.

The sublumbar lymph nodes 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.

Other

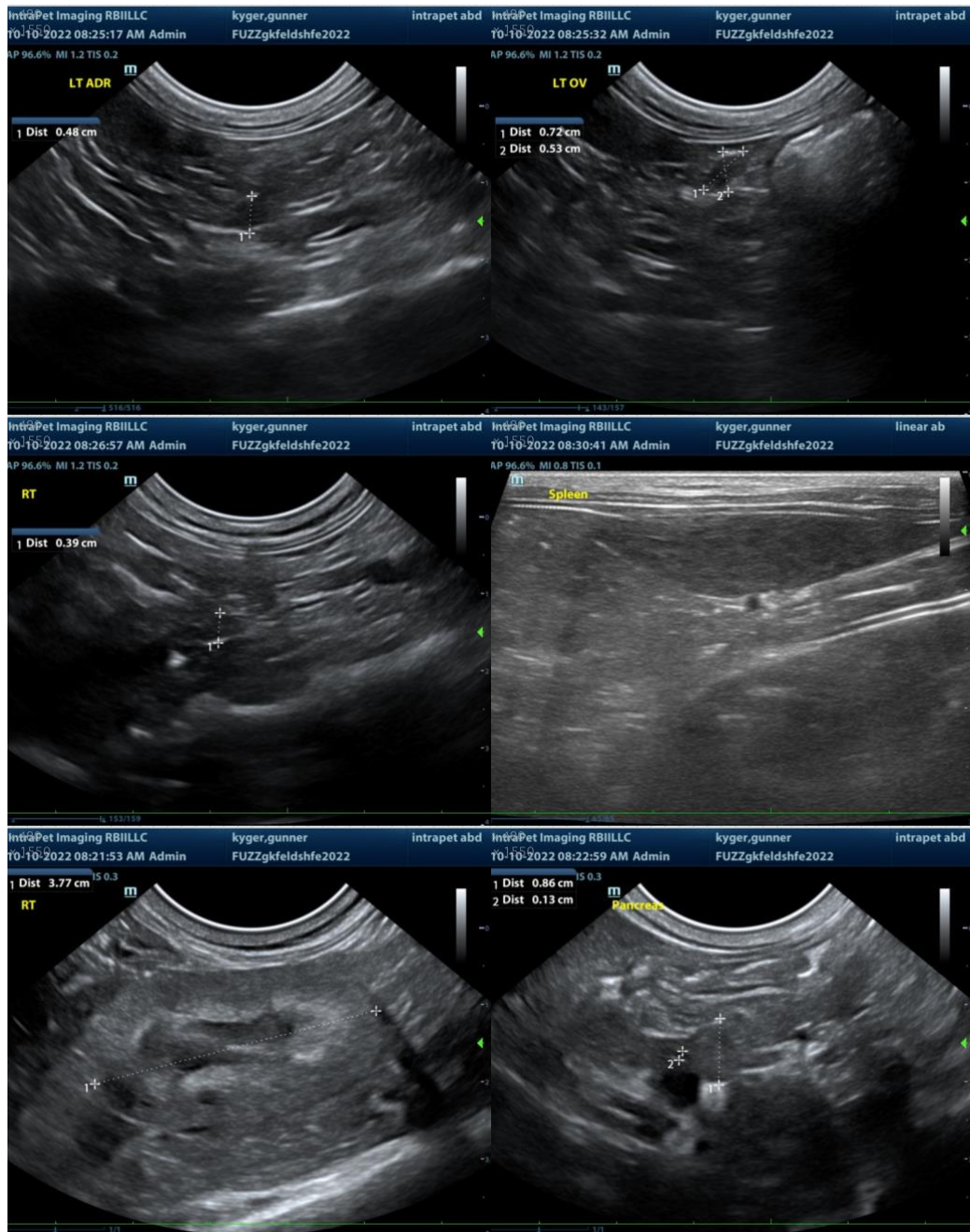
Both ovaries and the uterus are visualized without evident pathology.

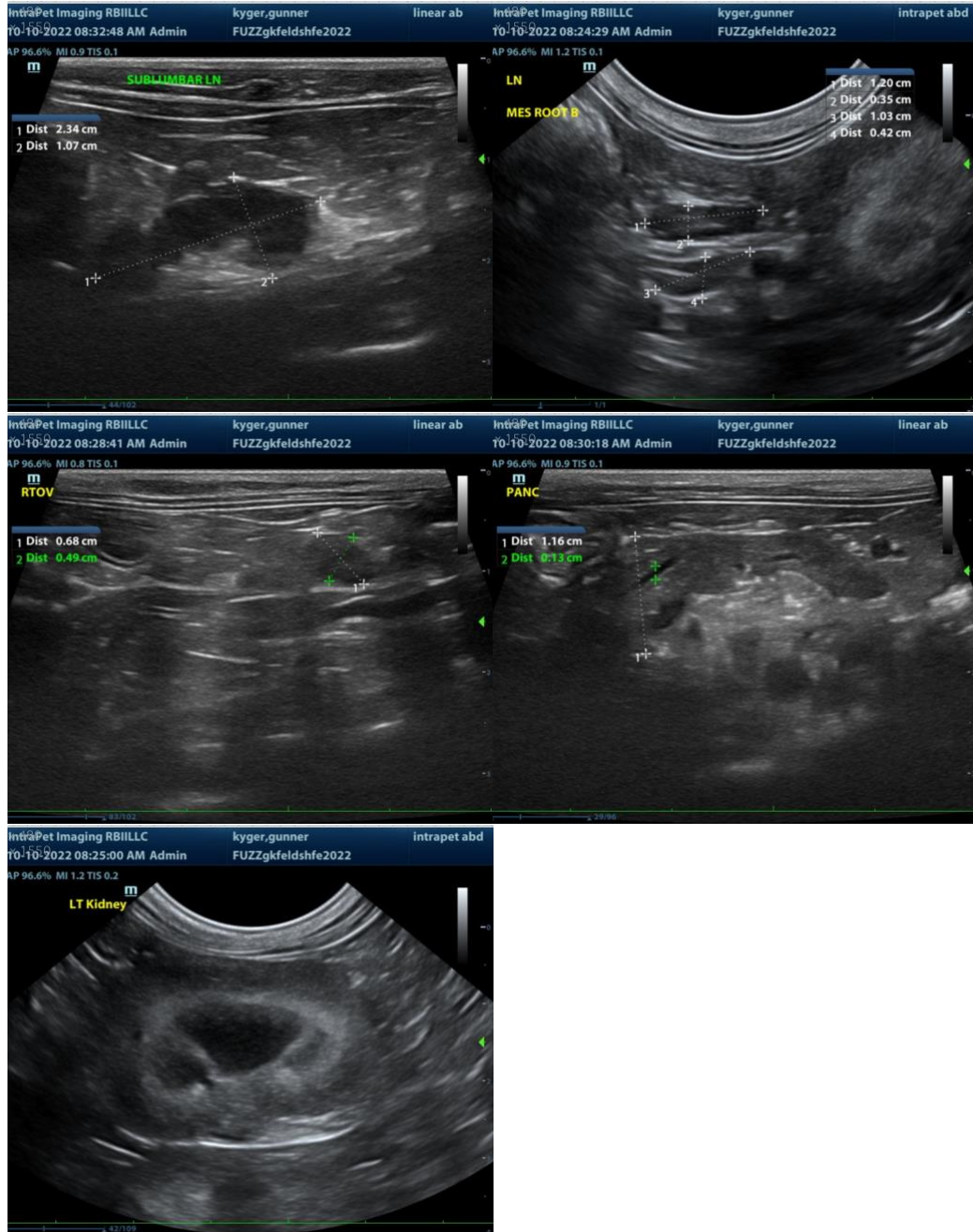
ULTRASONOGRAPHIC FINDINGS

- Medullary rim sign bilaterally - This finding is of unknown clinical significance and can be a normal variant, often idiopathic. Medullary rim sign can be present with renal disease including FIP, lymphoma, hypercalcemic nephropathy, Leptospirosis, tubular disease, other and should be interpreted in combination with other more specific indications of kidney disease such as isosthenuria, proteinuria, azotemia, etc. This is a common incidental finding in patients with diabetes mellitus.
- Splenic micronodular hyperplasia pattern – This nodular change is often associated with benign aging nodular hyperplasia. Infiltrative neoplasia, however, including both early hemangiosarcoma as well as round cell neoplasia cannot be ruled out. Given this patient's young age, infiltrative disease, either infectious or neoplastic, is considered more likely than the aging change that typically results in this pattern.
- The pancreas is visible but not overtly abnormal with no evidence of inflammation. This may be a normal age/patient variant or mild acute pancreatitis cannot be definitively ruled out.
- Reactive mesenteric lymph nodes – infiltrative neoplastic disease cannot be ruled out but is considered less likely.
- Aggressive sublumbar lymph nodes – most consistent with infiltrative round cell or metastatic neoplasia. A benign aggressive inflammatory response cannot be ruled out without tissue sampling +/- culture.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The appearance of this patient's kidneys, combined with reported laboratory changes is consistent with kidney disease. Given the concurrent pathology described, including the spleen and lymph nodes, both infectious diseases, such as FIP, as well as infiltrative neoplastic disease (i.e., lymphoma) are differentials. Recommendations include a fine needle aspirate of the enlarged sublumbar lymph nodes and spleen, if patient's coagulation status is appropriate, followed by infectious disease testing if indicated based on cytology results.





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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