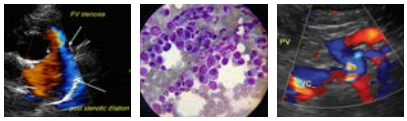
IMAGING PERFORMED BY

IntraPet.com



SonoPath

Clinical Sonography & Telecytology

EDUCATIONAL TELECONSULTATION SERVICES™

1-800-838-4268 info@sonopath.com SonoPath.com

DATE

10/7/22

PATIENT

Fia Chow

SPECIES

Canine

BREED

Schnauzer

SEX

Spayed Female

AGE

5/28/12

WEIGHT

57.1 Pounds

INTERPRETED BY

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

IMAGING PERFORMED BY

Rachel Brilhart RDMS

HOSPITAL NAME

Animal Emergency Hospital

REFERRING VET

Dr. Thompson

INVOICE

41920

PRESENTING CLINICAL SIGNS

Fia, FS, 10, Schnauzer, referred for continued care. Presented at RDVM: 10/5: SDMA 16 / CREA 2.1 / BUN 90, WBC 23.6k / NEU 13.7k / MONO1.98k, LYM 7.3K. BASO 0.4 k, K 6.1, Hypercalcemia i Ca+ 1.5 (H) Baseline Cortisol pending, 4dx negative. CXR/AXR at RDVM-- Report from Radiologists: Possible hypovolemia, no evidence of pulmonary metastatic disease. No evidence of gastric outflow obstruction or small intestinal mechanical obstruction. Multifocal chronic degenerative intervertebral disc disease. Hx: weeks intermittent inappetence, PD, Conjunctivitis, lost 10lbs in past two months(some even prior to that time noted earlier in year), raw diet, noted 3/30 BUN was 42, Creat 0.9
Prior hx: Arthritis in R hip--Previcox made her vomit, d/c
Current Problems: Azotemia Improved some BUN 90 to 42, Creat 2.1 to 0.9, Abnormal NA/K-- improved since IVF. Neutrophilia, Lymphocytosis, Monocytosis , Basophilia, Hypercalcemia. Progress: Urine inactive, bp 90

Remains anorexic; Stained eyes- no ulcer, started BNP w/ dex OU
Plan for US-- concern for more than just renal changes

Current Medications: BNP Ophth, Cerenia, Protonix, Ampicillin, Entyce, Buprenorphine.
Lab Results: See attached.
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder is moderately distended with anechoic 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 left kidney has a normal shape and size (8.21 cm) with mild pyelectasia at 0.23 cm. Overall echogenicity is normal with mildly reduced corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of focal perinephric inflammation or effusion. There is no evidence of nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The right kidney has a normal shape and size (6.91 cm). Overall echogenicity is normal with mildly reduced corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of focal perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

Adrenal Glands

The left adrenal gland is normal in size measuring 0.56 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.

The right adrenal gland is normal in size measuring 0.74 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.

Spleen

The spleen is subjectively normal in size, echotexture is homogenous, and the splenic capsule is smooth with no irregularities. 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 hypoechoic 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 gall bladder is not thickened and has a smooth mucosal surface. Luminal contents are mild and primarily anechoic. The cystic and common bile ducts are normal/not visible.

Gastrointestinal
The stomach contains minimal luminal contents. The distinction of the gastric wall layers is adequate and there is no impression of reduced peristaltic activity. There is an area of gastric wall that appears prominent with slightly decreased distinction of layering. This is in the region of the pylorus, where the stomach wall measures at approximately 1.07 cm.

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. Jejunum wall measures 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. 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. There are prominent mesenteric lymph nodes visualized at the mesenteric root, measuring 0.89, 0.75, and 0.58 cm. Additionally, there is a prominent lymph node near the ileocecal junction measuring 0.97 cm. The omentum is generally of normal echogenicity.

ULTRASONOGRAPHIC FINDINGS

- Mildly reduced corticomedullary distinction in both kidneys with mild pyelectasia in the left kidney – Mild loss of corticomedullary distinction in both kidneys could be consistent with chronic degenerative disease or interstitial nephrosis. Pyelectasia of the kidney(s)could be consistent with pyelonephritis, chronic renal disease, secondary to PU/PD or fluid therapy (if applicable), other.

- Prominent, mottled pancreas – The pancreatic changes are most consistent with age-related parenchymal remodeling, potentially secondary to a prior inflammatory episode, early fibrosis or chronic pancreatitis.

- Hypoechoic, heterogeneous 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. If there is no significant liver enzyme elevations, the significance of this is questionable.

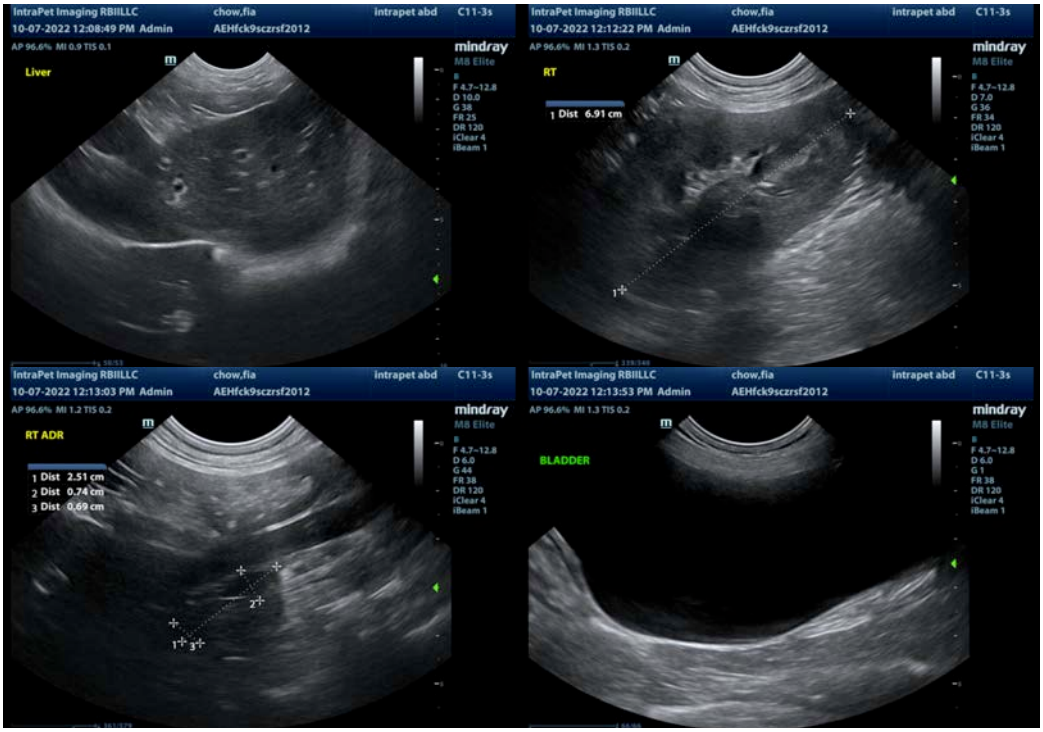
- Prominent/thickened gastric wall with decreased detail of layering in the pyloric region – This could be consistent with focal gastritis (uremic gastritis), an aberrant rugal fold, or infiltrative disease.

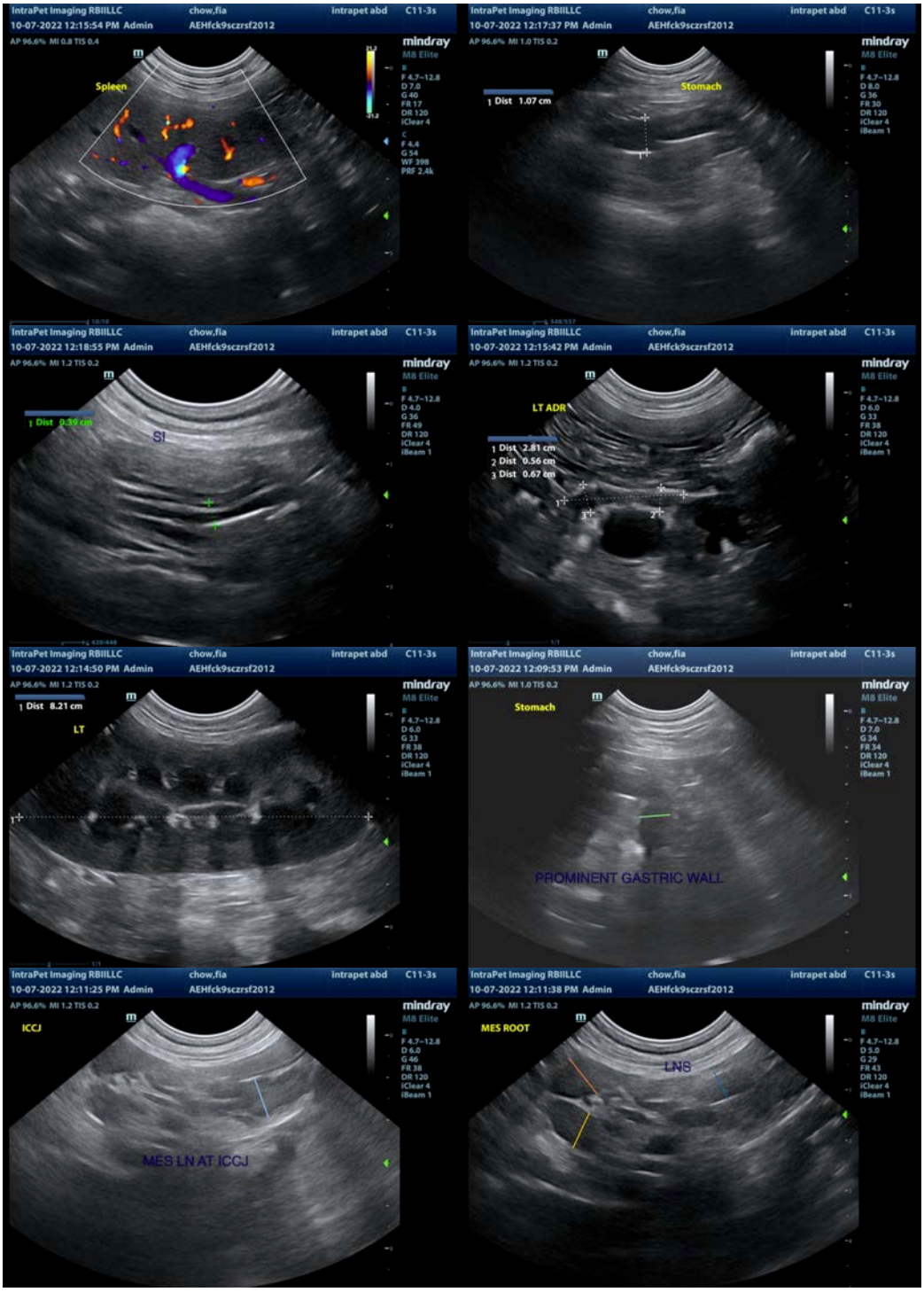
- Prominent mesenteric lymph nodes – The prominent abdominal lymph nodes are most consistent with reactive lymphadenitis or lymphoid hyperplasia. Neoplastic infiltration is considered less likely.

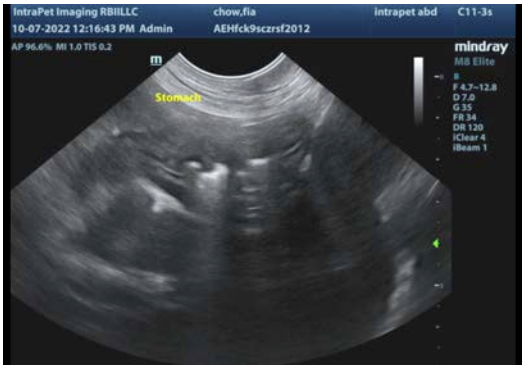
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

There are no focal lesions associated with the kidneys to explain the azotemia reported. The adrenals appear relatively normal in size. This does not exclude Addison's disease as a possibility, but it seems less likely. The significance of the other lesions described is questionable. There is an area in the gastric wall that appears prominent and somewhat thickened. This should be reevaluated if this patient is not feeling better. Additionally, there are some prominent mesenteric lymph nodes. If these lymph nodes can be reached for an aspirate, this would be an option for further evaluation. Additionally, the liver is somewhat hypoechoic and heterogeneous. This is a non-specific finding. If no liver enzyme elevations are present, the significance of this is questionable.

If not already done, recommend Leptospirosis screening, blood pressure evaluation, and an ionized calcium, PTH, and PTHrP fi the ionized calcium is elevated to look for underlying evidence of hyperparathyroidism or a malignancy. Recommend a thorough rectal exam to evaluate the anal glands and a good oral exam, looking for any malignancies. Additionally, you can see hypercalcemia with renal disease, but it is unusual to see an elevation in ionized calcium. Recommend a urine culture to evaluate the mild left-sided pyelectasia observed.




IntraPet Imaging RBIILLC
chow,fia
intrapet abd
C11-3s
10-07-2022 12:15:54 PM Admin
AEHfck9sczrsf2012
mindray
M8 Elite
Spleen
10-07-2022 12:17:37 PM Admin
Stomach
1 Dist 1.07 cm
10-07-2022 12:18:55 PM Admin
1 Dist 0.39 cm
SI
10-07-2022 12:15:42 PM Admin
LT ADR
1 Dist 2.81 cm
2 Dist 0.56 cm
3 Dist 0.67 cm
10-07-2022 12:14:50 PM Admin
1 Dist 8.21 cm
LT
10-07-2022 12:09:53 PM Admin
Stomach
PROMINENT GASTRIC WALL
10-07-2022 12:11:25 PM Admin
ICCJ
MES LN AT ICCJ
10-07-2022 12:11:38 PM Admin
MES ROOT
LNS



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.

Kathleen Sennello DVM,MS, Diplomate ACVIM (Small animal Internal Medicine)
kathleen.sennello@sonopath.com