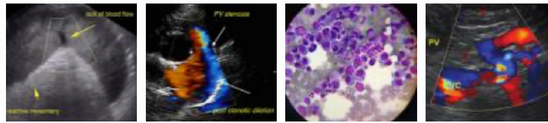
SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
1-800-838-4268 info@sonopath.com SonoPath.com



ANIMAL SOUNDS NW
MOBILE VETERINARY ULTRASOUND
IMAGING PERFORMED BY
AnimalSoundsNW.com 541-357-9423

**PATIENT**
Luni Potter

**SPECIES**
Feline

**BREED**
Domestic shorthair

**SEX**
Male, neutered

**AGE**
14 Yrs.

**WEIGHT**
4.5 kg.

**INTERPRETED BY**
Andrea Nicastro, DVM, Diplomate ACVIM (*Small Animal Internal Medicine*)

**IMAGING PERFORMED BY**
Jenna Walsh

**HOSPITAL NAME**
Wilvet South

**REFERRING VET**
Dr. Bennett

**DATE**
2/14/23

**INVOICE**
14593

## PRESENTING CLINICAL SIGNS

History: - Went to rDVM on 2/13 for 2 days inappetence. rDVM did blood work and applied mirtaz. Patient did eat a small amount last night after getting mirtazapine. - At rDVM, P has lost about 1 pound in 2 weeks. Blood work on 2/13/23 - see below. - Hx hyperthyroid. On methimazole 5mg PO BID, has not received in past few days due to inappetence. - Exam today: QAR, compliant. Grade 3/6 murmur. Thickened GI loops on palpation. Heart Rate and Respiratory Rates HR 190, RR 30 Blood Pressure Measurements 204/169 (173) Current Medications Gabapentin 75mg PO this morning. 2.5mg methimazole PO this morning. Primary Question/Differential to Be Answered in This Exam - Weight loss, inappetence, thickened GI, elevated fPL - R/O IBD, pancreatitis, neoplasia, open. - Heart murmur, hyperthyroidism - r/o structurally significant cardiac disease (would this preclude steroids if indicated?) Abnormal PE/Chem/CBC/UA Results: 2/13/23: - TT4 = 1.5, good control - Chem: Crea 1.6, ALT 22 L, AST 15 L - fPL 4.3 H (0 - 3.5) - CBC: Lymphopenia 577k, rest WNL - UA: good concentrating ability USG 1.047, rest NSF

## ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

### *Urinary System*

The urinary bladder wall is normal in thickness and the mucosal surface is smooth. The bladder lumen is moderately distended with anechoic urine. No masses, inflammatory changes or calculi are observed. Ureteral papillae and visualized portion of the proximal urethra, visible to a depth of 2 cm, are normal.

The left kidney is borderline enlarged (4.66 cm in length); normal shape and architecture with smooth peripheral margins. The cortex is isoechoic relative to the spleen. There is a normal 1:3 cortex to medulla ratio with mild to moderate loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The right kidney is normal size (4.59 cm in length); normal shape and architecture with smooth peripheral margins. The cortex is isoechoic relative to the spleen. There is a normal 1:3 cortex to medulla ratio with mild to moderate loss of corticomedullary distinction. Trace pyelectasia is present. There is no evidence of nephroliths, infarcts or hydroureter. Renal vasculature is normal.

### *Adrenal Glands*

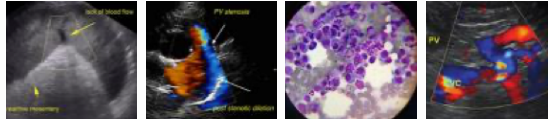
The left adrenal gland is normal in size (0.49 cm width). Normal shape and glandular echogenicity. The phrenicoabdominal vein and surrounding vasculature are normal.

The region of the right adrenal gland is evaluated. No obvious pathology is observed.

### *Spleen*

The spleen is normal in size (0.75 cm in width at the level of the hilus) with a normal capsular contour. Using the high frequency probe, a light micronodular pattern is observed throughout the parenchyma. A 0.45 cm hyperechoic nodule is observed at the lateral aspect. Splenic vasculature is normal.

### *Liver*





**PATIENT**

Luni Potter

**SPECIES**

Feline

**BREED**

Domestic shorthair

**SEX**

Male, neutered

**AGE**

14 Yrs.

**WEIGHT**

4.5 kg.

**INTERPRETED BY**

Andrea Nicastro, DVM, Diplomate ACVIM (*Small Animal Internal Medicine*)

**IMAGING PERFORMED BY**

Jenna Walsh

**HOSPITAL NAME**

Wilvet South

**REFERRING VET**

Dr. Bennett

**DATE**

2/14/23

**INVOICE**
14593

The liver is subjectively normal in size with normal contours and structure. There is appropriate echogenicity and echotexture. No overt structural evidence of inflammatory, infiltrative or regenerative pathology is evident. Vascular and biliary tracts are of normal volume with no evidence of congestion. No pathological hepatic lymphadenopathy observed. The gall bladder lumen is moderately distended. The wall is thin and smooth. Luminal contents are anechoic. The cystic and common bile ducts are normal/not seen.

### *Gastrointestinal*

The gastric lumen is mildly to moderately distended with ingesta and soft shadowing material. The gastric wall is normal in thickness with a normal layering pattern. The small intestinal lumen is segmentally dilated with chyme. The small intestinal wall is normal to mildly thickened (up to 0.31 cm) with a normal layering pattern and appropriate mural detail. There is slight disruption in the normal 1:3 muscularis to mucosal ratio in some segments. Discreet masses are not identified. The ileocecocolic junction and colonic wall are normal. No obvious obstructive disease is noted.

### *Pancreas*

The pancreas is diffusely visible/prominent with minimal deviation from the normal peripheral contours. The parenchyma is hypoechoic relative to surrounding omental fat. No focal lesions are observed. The pancreatic duct is mildly dilated (up to 0.29 cm in diameter).

### *Free Abdomen*

There is no obvious evidence of free fluid. Several prominent mesenteric lymph nodes are visualized, the largest measuring 1.03 cm in length. Surrounding mesentery is hyperechoic.

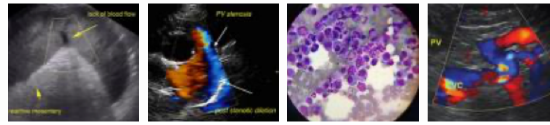
## ULTRASONOGRAPHIC FINDINGS

**Primary Findings:**

- The pancreatic changes are consistent with chronic pancreatitis.
- Bowel pattern suggestive of inflammatory bowel disease. There is some potential for emerging lymphoma. However, neoplasia is considered less likely at this time.
- The prominent abdominal lymph nodes could be consistent with reactive change or emerging neoplasia (i.e., lymphoma).

**Secondary Findings:**

- The splenic parenchymal changes are most consistent with a benign process such as lymphoid hyperplasia, extramedullary hematopoiesis, splenitis or antigenic stimulation with a low possibility of infiltrative neoplasia (i.e., lymphoma, mast cell neoplasia).
- Bilateral, chronic, age-related renal changes.
- The gastric luminal contents could be consistent with normal ingesta and/or foreign material (i.e., hair).





**PATIENT**
Luni Potter

**SPECIES**
Feline

**BREED**
Domestic shorthair

**SEX**
Male, neutered

**AGE**
14 Yrs.

**WEIGHT**
4.5 kg.

**INTERPRETED BY**
Andrea Nicastro, DVM, Diplomate ACVIM (*Small Animal Internal Medicine*)

**IMAGING PERFORMED BY**
Jenna Walsh

**HOSPITAL NAME**
Wilvet South

**REFERRING VET**
Dr. Bennett

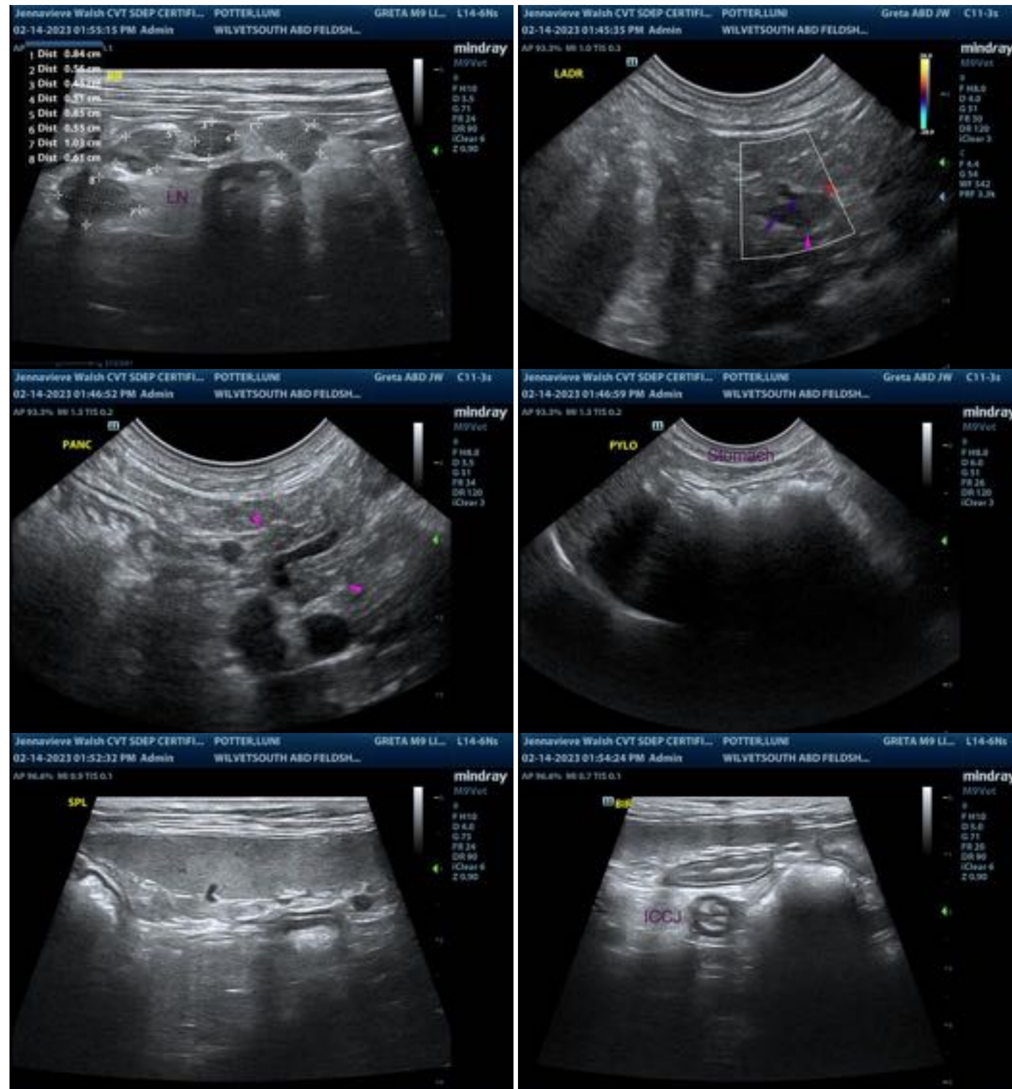
**DATE**
2/14/23

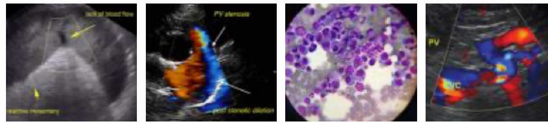
**INVOICE**
14593

## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Given the patient's clinical history and sonographic changes, consider the following:

1. Malabsorption panel including serum cobalamin, folate, TLI and PLI.
2. A fecal evaluation for ova/Giardia.
3. 6 week hypoallergenic or hydrolyzed protein diet trial.
4. Depending on the results of the above diagnostics/therapeutics as well as the echocardiogram results, GI biopsies may be warranted.
5. Also consider initiation of a probiotic.







**PATIENT**
Luni Potter

**SPECIES**
Feline

**BREED**
Domestic shorthair

**SEX**
Male, neutered

**AGE**
14 Yrs.

**WEIGHT**
4.5 kg.

**INTERPRETED BY**
Andrea Nicastro, DVM, Diplomate ACVIM (*Small Animal Internal Medicine*)

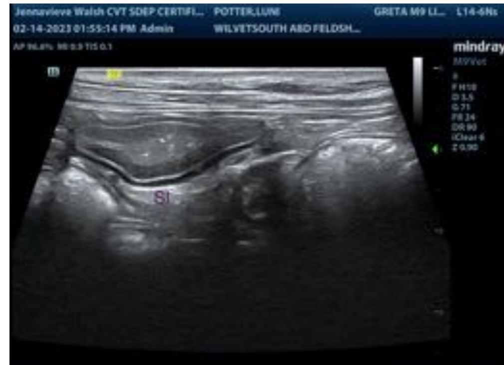
**IMAGING PERFORMED BY**
Jenna Walsh

**HOSPITAL NAME**
Wilvet South

**REFERRING VET**
Dr. Bennett

**DATE**
2/14/23

**INVOICE**
14593




**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.

Andrea Nicastro, MPH, DVM, Diplomate DACVIM (Small Animal Internal Medicine)
info@SonoPath.com