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Clinical Sonography & Telecytology
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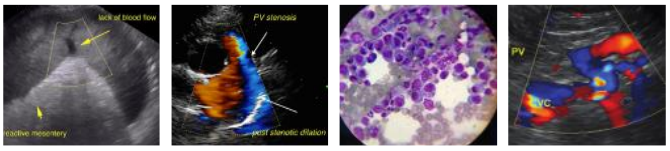


SonoPath.com
1-800-838-4268 info@sonopath.com

**PATIENT**

Oscar Klineburger

**SPECIES**

Canine

**BREED**

Greater Swiss Mt Dog

**SEX**

Neutered Male

**AGE**

10.5 years

**WEIGHT**

118 pounds

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Tam Mengine, DVM, DABVP (canine/feline)

**HOSPITAL NAME**

Stoney Creek VH

**REFERRING VET**

Tam Mengine, DVM, DABVP (canine/ feline)

**INVOICE**

10295

**DATE**

2/9/22

## PRESENTING CLINICAL SIGNS

History: Presented 9/21 for generalized dermatitis, weight loss and lethargy. On exam, several peripheral lymph nodes were prominent, and the spleen felt enlarged. Recheck 10/21 after treating dermatitis, all lymph nodes and spleen back to normal, but further wt loss (total of 13 pounds lost in 1 year). CBC / Chem performed - BUN 25, Creat 1.5, SDMA 17. U/A - SpGr 1.017, UPC = 4.0 Blood pressure 208sys. Started amlodipine and amlodipine. Recheck 2/22 - blood pressure 158 sys, Wt back up 3 pounds, feeling well at home, normal physical exam. Recheck labwork - Creat up to 1.7, SDMA 20, Urine SpGr - 1.016, UPC 8.1. Patient had a GDV and gastropexy in 2020.

Abnormal PE/Chem/CBC/UA Results:

## ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

### *Urinary System*

The urinary bladder, trigone, and pelvic urethra are normal in thickness and the mucosal surface is smooth. The bladder is moderately distended. A small amount of suspended echogenic debris is observed within the lumen. 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 prostate is prominent in size (2.14 cm in width) with a normal shape and peripheral contours. Parenchyma is homogenous. No focal lesions are observed. The prostatic urethra is not overtly dilated

The left kidney is normal size (8.09 cm in length); normal shape and architecture with smooth peripheral margins. The cortex is mildly thickened and there is mild to moderate loss of corticomedullary distinction. Trace pyelectasia is present. There is no evidence of nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The right kidney is normal size (7.50 cm in length); normal shape and architecture with smooth peripheral margins. The cortex is mildly thickened and there is mild to moderate loss of corticomedullary distinction. Two to three small cortical cysts are visualized. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

### *Adrenal Glands*

The left adrenal gland is small in size (0.57 cm at cranial pole) (0.51 cm at caudal pole); normal shape; homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

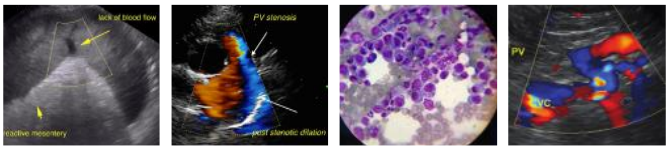
The right adrenal gland is small in size (0.54 cm at cranial pole) (0.44 cm at caudal pole); normal shape; homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

### *Spleen*

The spleen is normal in size (2.48 cm in width at the level of the hilus) with a normal capsular contour. A light micronodular pattern is present throughout the parenchyma. No focal lesions are observed. Splenic vasculature is normal.

### *Liver*

The liver is subjectively normal in size with normal curvilinear peripheral contours. The parenchyma is hypoechoic relative to the spleen with minor changes consistent with age-related remodeling. No

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focal lesions are observed. Hepatic vasculature and biliary tracts are of normal volume with no evidence of congestion.

The gall bladder is of normal contours and contains some dependent echogenic debris. The wall is normal in thickness. No choleliths are observed. The cystic and common bile ducts are normal/not seen.

***Gastrointestinal***

The gastric lumen is not distended. The gastric wall is normal in thickness with a normal layering pattern. The small intestinal lumen is not dilated. The small intestinal wall thickness is normal with a normal layering pattern and appropriate mural detail. Discreet masses are not identified. The colonic wall is normal. No obstructive or overt infiltrative disease is noted.

***Pancreas***

The region of the pancreas is isoechoic relative to surrounding omental fat. No obvious parenchymal abnormalities are observed. There is no evidence of regional inflammation or effusion.

***Free Abdomen***

A 3.04 x 2.57 cm well-circumscribed, solid, echogenic mass is observed in the right mid-abdomen, just caudal to the right kidney. The mesentery effacing the serosal surface of the mass is slightly hyperechoic. Trace free fluid is observed. A 2.32 x 1.35 cm partially cystic medial iliac lymph node is visualized. A few prominent mesenteric lymph nodes are also seen, the largest measuring 3. 69 cm in length.

## ULTRASONOGRAPHIC FINDINGS

### Primary Findings

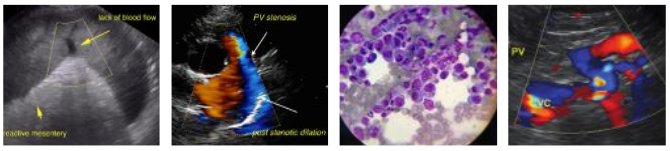
- The origin of the right mid-abdominal mass is unclear. It may be arising from mesentery, lymph node, other. Neoplasia is suspected. However, a granuloma or inflammatory focus cannot be completely excluded. Regional peritonitis is present. The prominent adjacent lymph nodes could be consistent with reactive lymphadenitis, lymphoid hyperplasia or infiltrative neoplasia.
- Bilateral chronic nephropathy. Based on the clinical history a protein-losing nephropathy is likely.

### Secondary Findings

- The splenic parenchymal changes are most consistent with a benign process such as lymphoid hyperplasia, extramedullary hematopoiesis or splenitis with a low possibility of infiltrative neoplasia (i.e., lymphoma, mast cell neoplasia).
- The hepatic changes are consistent with age-related parenchymal remodeling and are not considered clinically significant at this time.
- The bilaterally small adrenal glands may be a normal variant for this patient or less likely, secondary to atrophy (i.e., due to corticosteroid use, if applicable, or hypoadrenocorticism).

## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- Three-view thoracic radiographs are recommended to assess for pulmonary metastases.

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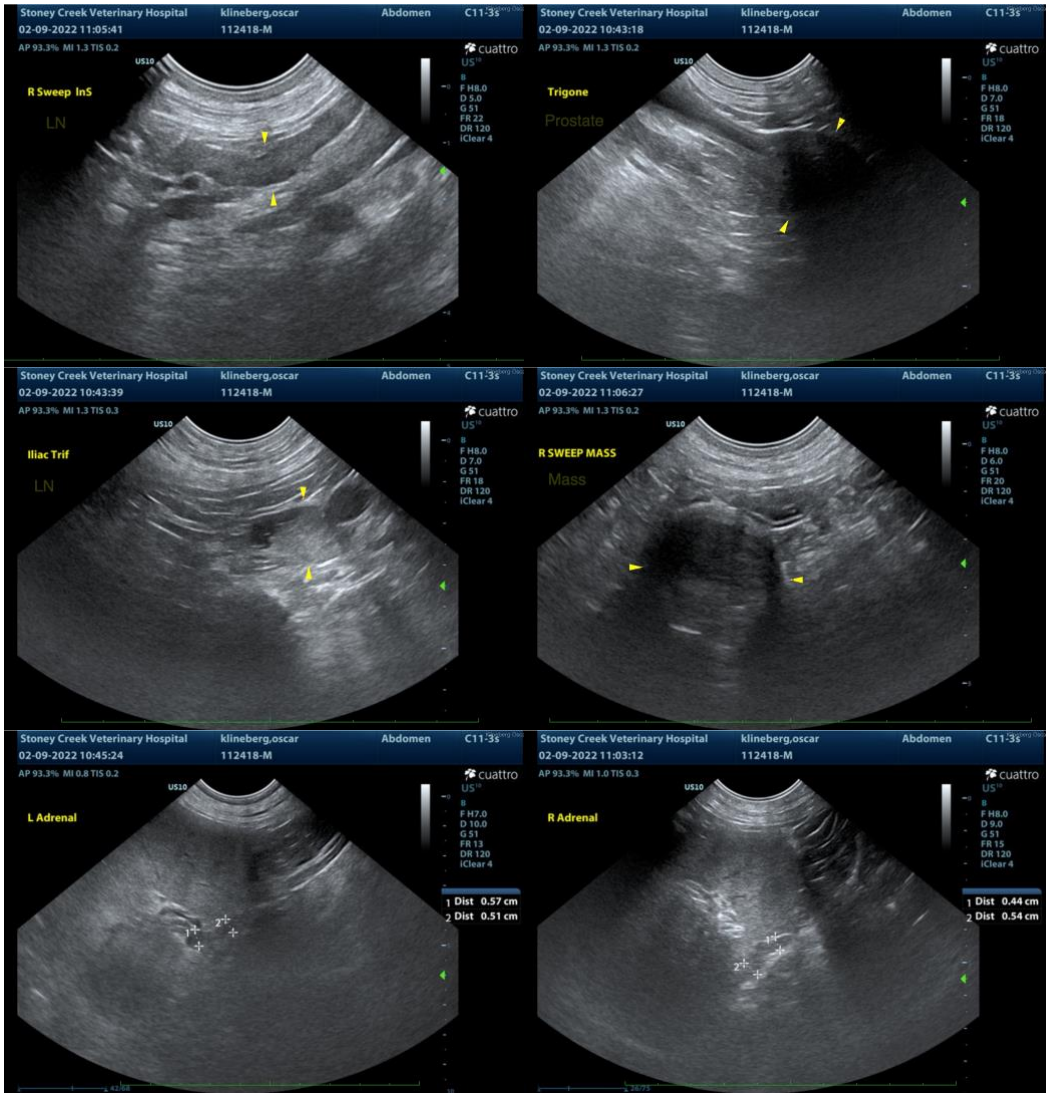
- A fine-needle aspirate of the mid-abdominal mass is recommended if clotting status is appropriate. A 25-gauge needle should be used. If cytology results are inconclusive, or if the mass is not accessible, consider an abdominal exploratory with mass removal and submission for histopathology. If surgery is pursued, the prominent abdominal lymph nodes should also be biopsied to assess for metastatic disease.

- Regarding the protein-losing nephropathy, consider the addition of an angiotensin receptor blocker to help reduce proteinuria +/- an anti-thrombotic agent (i.e., Clopidogrel), +/- Omega-3 fatty acids.



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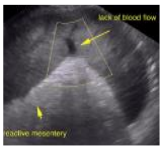
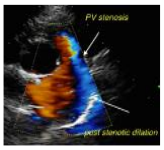
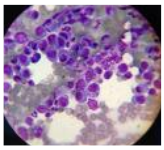
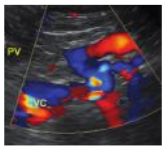

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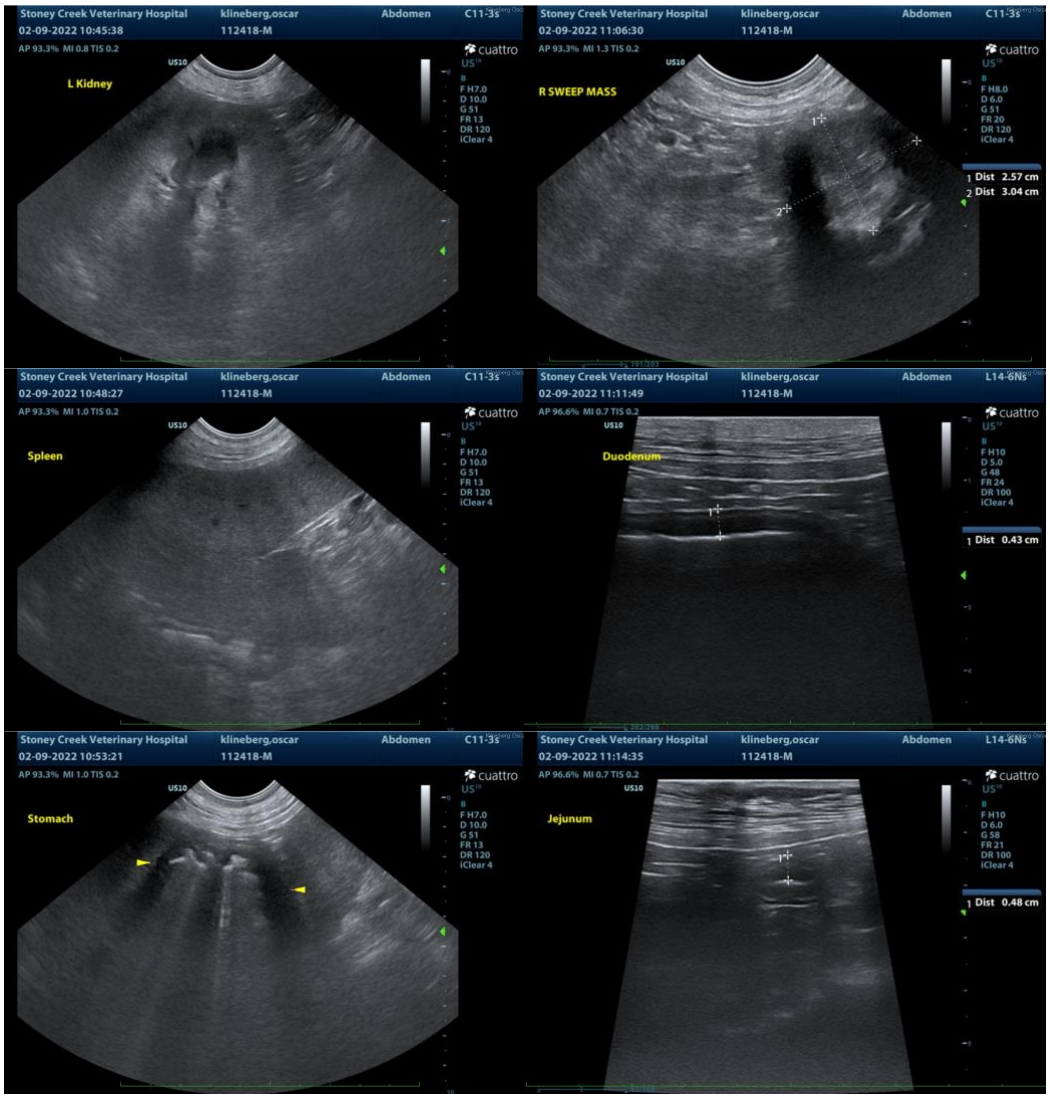

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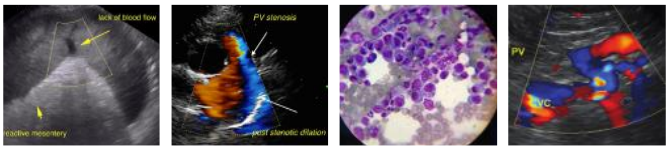

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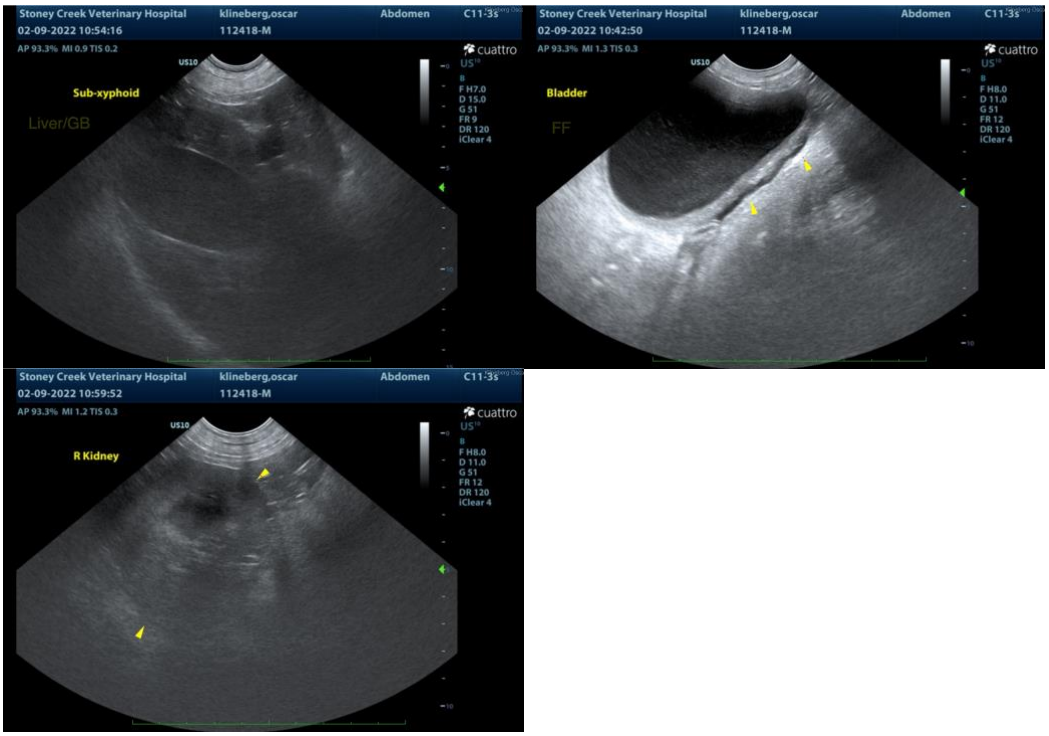


**The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.**

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.

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