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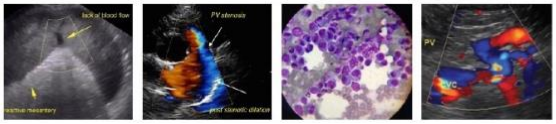


THE FOCAL ZONE
IMAGING PERFORMED BY
289-808-2608 info@thefocalzone.com

**PATIENT**

Oscar Semenuk

**SPECIES**

Canine

**BREED**

Chihuahua

**SEX**

Neutered Male

**AGE**

10 Years

**WEIGHT**

3.6 kg

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Kelly Reschny

**HOSPITAL NAME**

AH of Stoney Creek

**REFERRING VET**

Dr. Martin

**INVOICE**

37621

**DATE**

5/11/22

## PRESENTING CLINICAL SIGNS

Gradual decline in appetite/energy, worsening in the last week. Was having waxing/waning vomiting and diarrhea, but none recently. Moderate lethargy and inappetence now for 2-3 days. PE: lethargic, has lost 0.7 lbs since last summer. P 110 and regular, mm pale, crt na (only because he bites, but not today, he is super sick), NSF on heart, lungs, abdomen gaunt. Moderate muscle atrophy over HQ and epaxials, unable to stand or hold head up easily. Severe halitosis. meds: PLA + Kcl-, cerenia, famotidine, baytril, ampicillin
Abnormal PE/Chem/CBC/UA Results: Anemia- RBC 4.75 HCT 31.5 WBC 44 Neuts 36 slight lymphocytosis and monocytosis SDMA 25 ALT 141 (10-125) ALP 379 (23-212) K+ 3.8 lipase 1538

## 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 prostate is normal to borderline large in size (1.5 cm) and shape for this neutered male dog. The parenchyma is homogenous and the external margins are smooth. The prostatic urethra appears normal with no evidence of irregularity, invasion, mass effect or calculi.

The left kidney has a normal shape and size (3.61 cm). Overall echogenicity is slightly hyperechoic with poor corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The right kidney has a normal shape and size (3.59 cm). Overall echogenicity is slightly hyperechoic with poor corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of 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 0.57 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.

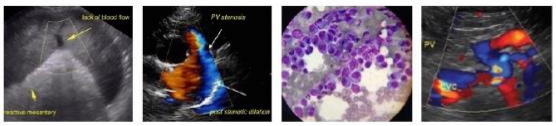
The right adrenal gland is normal in size measuring 0.64 cm at the caudal pole. It is observed in its normal position between the cranial aspect of the right kidney and the caudal vena cava. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

### *Spleen*

The spleen is large, irregular and heterogeneous. The blood flow through the hilus and splenic parenchyma appears normal. There is a very large, irregular, mixed echogenicity and partially cavitated mass effect that appears to be arising from the spleen, measuring approximately 9.6 cm x 4.86 cm.

### *Liver*

The liver is subjectively normal in size, and echogenicity 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. There is a 1.5 cm hypoechoic nodule visualized on the left side of the liver.





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The gallbladder large, measuring 2.86 cm x 2.3 cm with a large amount of hyperechoic intraluminal debris. The wall of the gall bladder appears normal in thickness. No evidence of bile duct dilation.

### *Gastrointestinal*

The stomach contains minimal luminal contents. It measures at a normal thickness of <0.7cm with some variability due to the presence of rugal folds. The distinction of the gastric wall layers is adequate and there is no impression of reduced peristaltic activity. No masses or focal lesions were observed.

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. The duodenum measured as normal (between 0.3-0.5cm in wall thickness) and the jejunum measured as normal (between 0.2-0.47cm.) 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 area of the pancreas is normal and isoechoic to surrounding 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, or subjective lymphadenomegaly. The Medial iliac nodes appear normal and there was no evidence of a caudal aortic thrombus at the bifurcation. The omentum is of increased echogenicity surrounding the large abdominal mass.

## PRIMARY FINDINGS

- Mottled spleen with large, irregular mixed echogenicity and cavitated splenic mass – A large, heterogenous mass with cavitations is present within the splenic parenchyma. The mass distorts the splenic capsule. Differentials for the mass include neoplasia (e.g., hemangiosarcoma, hemangioma), hematoma, abscess, other. A neoplastic process is favored.

- Heterogeneous liver with hypoechoic nodule – 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. While only one hypoechoic nodule is visualized, this could be concerning for a possible metastatic lesion.

- Distended gallbladder with large amount of hyperechoic intraluminal debris – The significance of the aggregated gallbladder sludge is unclear. This could represent an early mucocele, cholestasis, or may be secondary to fasting.

## SECONDARY FINDINGS

- Decreased corticomedullary distinction in both kidneys – The bilateral renal findings are consistent with age-related change.

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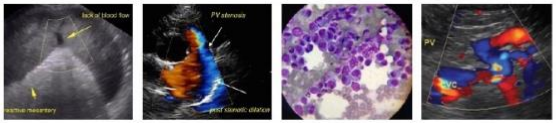

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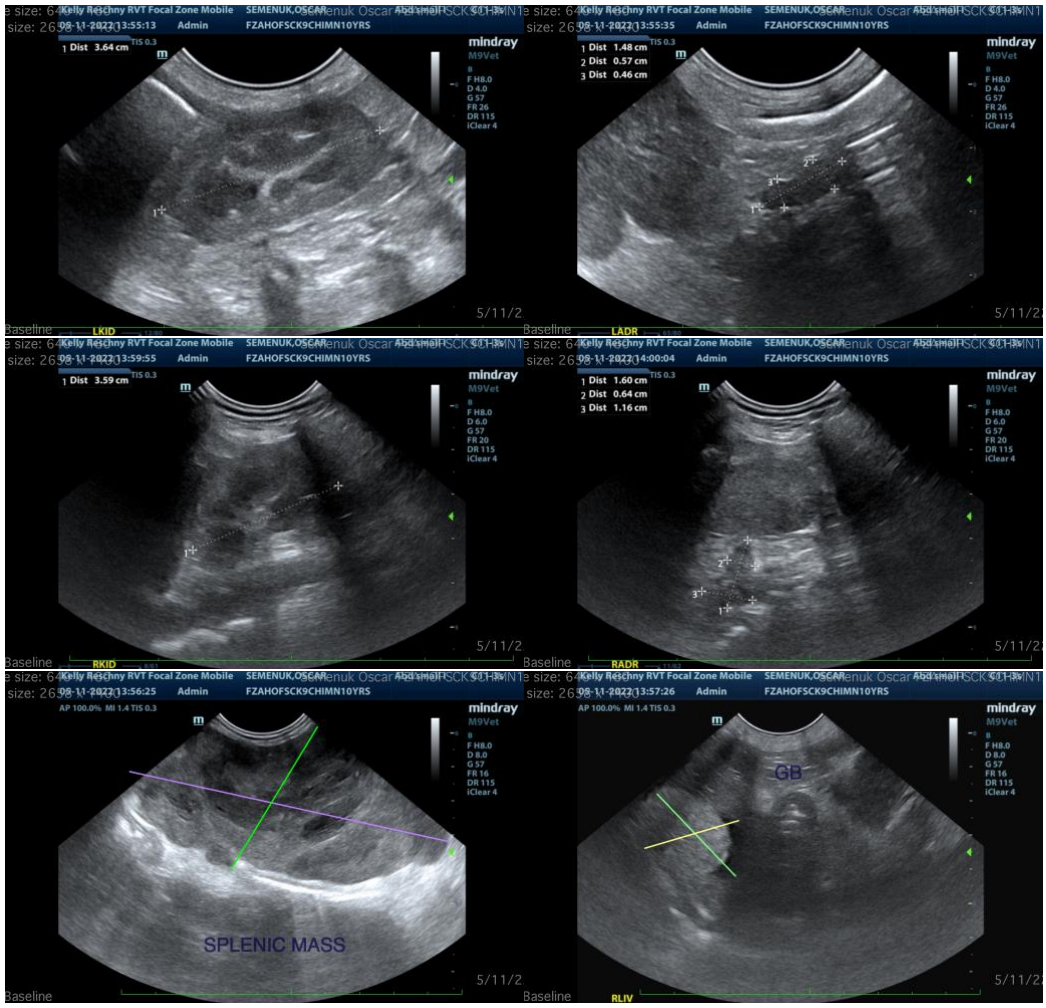
## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

There is a large, irregular, partially cavitated, mixed echogenicity mass effect in the left cranial abdomen, which appears to be arising from the spleen. This mass effect is surrounded by inflamed mesentery. Additionally, there is a hypoechoic nodule visualized in the liver. This could represent a metastatic lesion, or it could represent a benign, unrelated nodule. Recommend 3-view thoracic radiographs and either splenectomy (for both diagnostic and therapeutic purposes) with sampling/removal of the hepatic nodule at the time of surgery, or a fine needle aspirate of the hepatic nodule prior to considering surgery.

There is a large amount of debris within the gallbladder. Recommend continued monitoring and consider Ursodiol therapy once the splenic lesion has been dealt with



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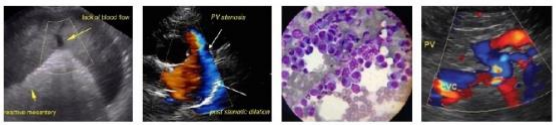

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**The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.**

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.

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

kathleen.sennello@sonopath.com