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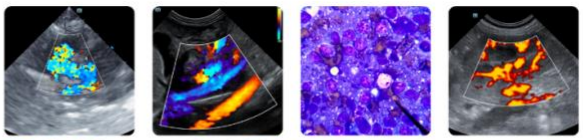

Clinical Sonography & Telecytology
Educational Teleconsultation Services™

**PATIENT**

Zeus Koehler

**SPECIES**

Canine

**BREED**

Siberian Husky

**SEX**

Neutered Male

**AGE**

12

**WEIGHT**

Not Provided

**INTERPRETED BY**

Andrea Nicastro DVM
Diplomate ACVIM
(Sm Animal Internal Med)

**IMAGING PERFORMED BY**

Andrea Nicastro DVM
Diplomate ACVIM
(Sm Animal Internal Med)

**HOSPITAL NAME**

VC of Myrtle Beach

**REFERRING VET**

Dr Boland

**INVOICE**

22296

**DATE**

12-19-25

## PRESENTING CLINICAL SIGNS

Acute onset of hemorrhagic gastroenteritis. On 12/17 went to the ER and was treated there anechoic transferred to the VC of Myrtle Beach yesterday. On IV fluids, metronidazole, and Unasyn. Patient has remained laterally recumbent. Has liquid diarrhea. Has had hypotension, but blood pressure appears to be improving. Yesteray, the diarrhea was hemorrhagic. Today is dark brown, gray, and black.

## ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

### *Urinary System*

The urinary bladder wall is normal in thickness. The mucosal surface is smooth. The bladder is moderately distended. A small to moderate amount of suspended echogenic debris is observed within the lumen. No cystic calculi are observed. The region of the trigone and the proximal urethra, visible to a depth of 2 cm, are normal.

The prostate is normal in size (1.15 cm in width) and shape. Parenchyma is homogenous. The prostatic urethra appears normal without evidence of dilation or obstruction.

The left kidney is normal in size (6.33 cm in length) with a normal shape, architecture and smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The right kidney is normal in size (7.27 cm in length) with a normal shape, architecture and smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

### *Adrenal Glands*

The left adrenal gland is normal in size (0.48 cm at cranial pole) (0.6500777 cm at caudal pole) with a normal shape and 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 subjectively normal in length with a slightly flattened contour (0.60 cm at cranial pole) (0.47 cm at caudal pole). Glandular echogenicity and detail are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

### *Spleen*

The spleen is normal in size (1.11 cm in width at the level of the hilus) with a normal capsular contour. There is appropriate echogenicity and echotexture. No focal lesions are observed. Splenic vasculature is normal.

### *Liver*

The liver is subjectively normal in size with normal peripheral contours. The parenchyma is hypoechoic relative to the spleen. A 4.4 x 3.4 cm heterogenous mass is observed on the left side. The remaining parenchyma is relatively homogenous. Intrahepatic mineralization is observed throughout the organ. Hepatic vasculature and intrahepatic biliary tracts are of normal volume with no evidence of congestion.

The gallbladder is moderately distended. The wall is variably thickened (up to 0.41 cm), hyperechoic, and irregular. Partially dependent-to-suspended echogenic-to-mineralized debris/sand is observed within the lumen. The cystic and common bile ducts are normal/not seen. Surrounding mesentery is hyperechoic.

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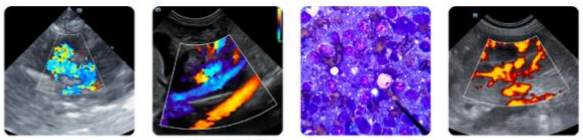

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***Gastrointestinal***

The gastric lumen is severely fluid-distended and hypomotile. The gastric wall and pylorus are normal in thickness with a normal layering pattern and appropriate mural detail. The pyloric outflow tract is patent. The small intestinal lumen is segmentally fluid-distended (mild). The small slightly intestinal wall is normal to mildly thickened (up to 0.41 cm). There is thickening of the submucosal layer in some regions. Discreet masses are not identified. The ileocecocolic junction is normal. The wall of the descending colon is diffusely thickened (up to 0.81 cm) with apparent retention of the normal layering pattern. There is no obvious evidence of an obstructive pattern.

***Pancreas***

The left limb of the pancreas is visible with normal curvilinear peripheral contours. The parenchyma is hypoechoic relative to surrounding omental fat and slightly mottled in appearance. The pancreatic duct is visible but not overtly dilated. There is no evidence of peripancreatic inflammation or effusion.

***Lymph Nodes***

A few prominent mesenteric lymph nodes are visualized (one measuring 0.79 cm in its longest dimension).

***Free Abdomen***

The mesentery mesentery throughout the abdomen is hyperechoic. Trace free fluid is observed.

## ULTRASONOGRAPHIC FINDINGS

### Primary Findings

- Left hepatic mass. Neoplasia (i.e., adenoma, adenocarcinoma, sarcoma, round cell tumor) is suspected with a lower possibility of a focal inflammatory process. This is suspected to be an incidental finding unrelated to the patient's current clinical signs.
- Diffuse gastrointestinal ileus with intestinal wall changes most consistent with enteritis, with a lower possibility of infiltrative neoplasia.
- The gallbladder wall changes are most consistent with cholecystitis. The gallbladder luminal sludge may be secondary to cholestasis, fasting, or an emerging mucocele.
- Diffuse peritonitis, likely secondary to gastrointestinal, +/- hepatobiliary pathology

### Secondary Findings

- The prominent abdominal lymph nodes are most consistent with reactive lymphadenitis or lymphoid hyperplasia. Neoplastic infiltration is considered less likely.
- The slightly flattened right adrenal gland may be a normal variant for this patient or could be secondary to atrophy (i.e., due to emerging hypoadrenocorticism).
- Urinary bladder debris
- The pancreatic changes are most consistent with age-related parenchymal remodeling, potentially secondary to a prior inflammatory episode, early fibrosis or chronic pancreatitis.

* An obvious cause for the patient's acute hemorrhagic gastroenteritis is not definitively identified in this study. Considerations include infectious/parasitic disease, toxicity, dietary indiscretion, food allergy/intolerance, other. There is evidence of diffuse ileus. Given the patient's clinical status, sepsis is

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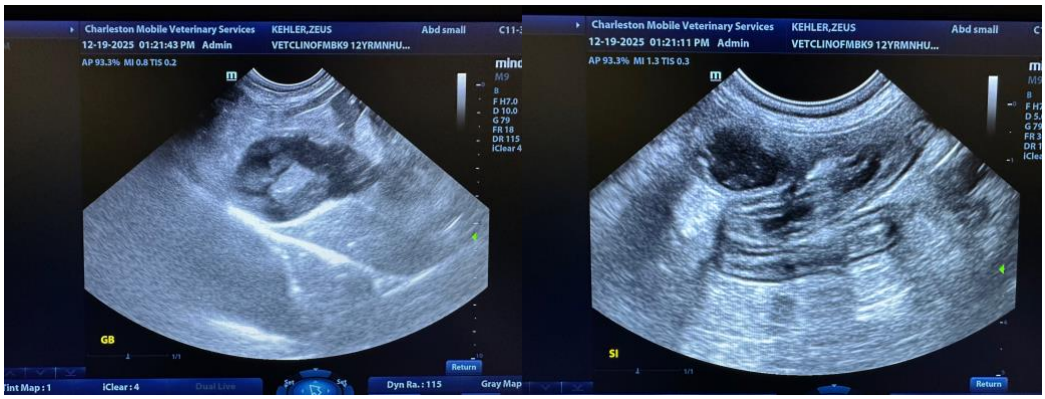
of top concern, possibly secondary to bacterial translocation.

## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- Given the liver mass, three-view thoracic radiographs are recommended to assess for metastatic disease.

- Given the patient's current clinical condition, consider the following:

1. Fecal evaluation for ova and Giardia, along with a fecal PCR infectious disease panel
2. A resting cortisol level to screen for hypoadrenocorticism. If resting cortisol level is < 2.0 mcg/dL, an ACTH stimulation test is recommended.
3. Aggressive supportive care for acute hemorrhagic gastroenteritis/cholecystitis, along with empirical treatment for sepsis.
4. Bloodwork should be close monitored for evidence of organ dysfunction, as well as disseminated intravascular coagulation/systemic inflammatory response syndrome.
5. Transfer to a 24-hour facility for aggressive supportive care is recommended.



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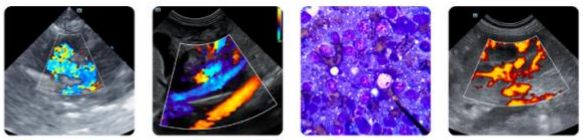

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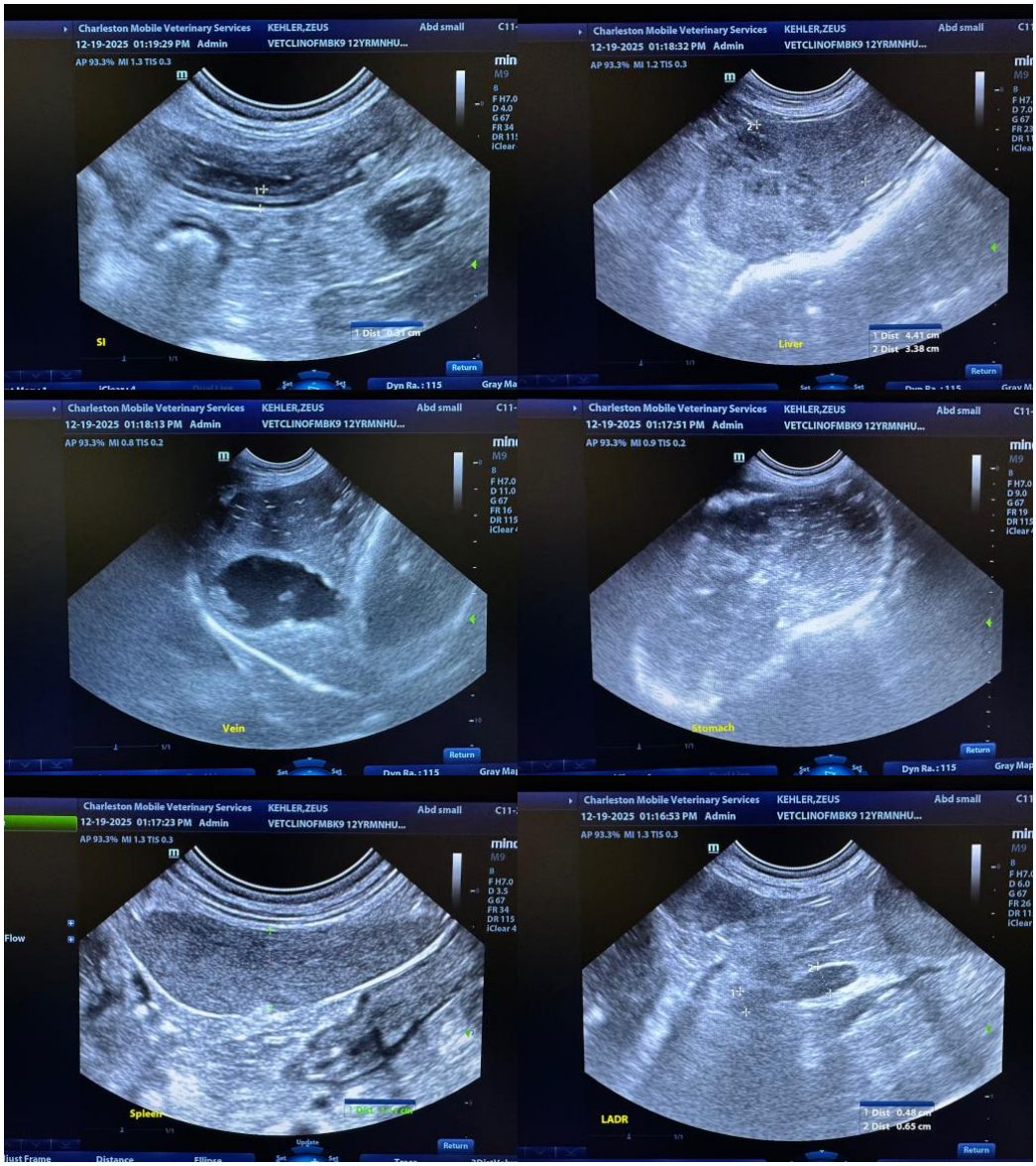

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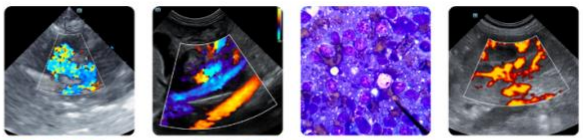

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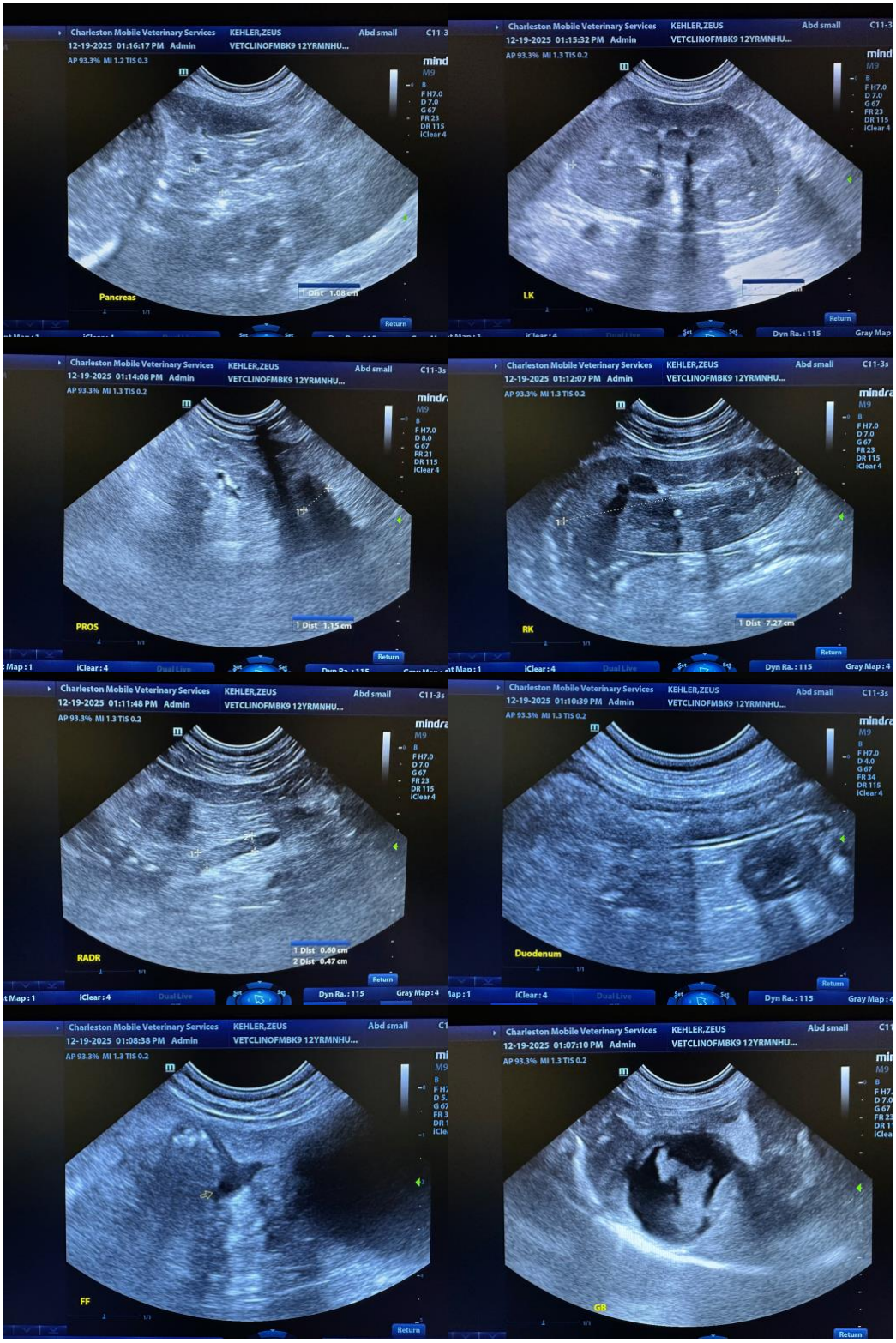

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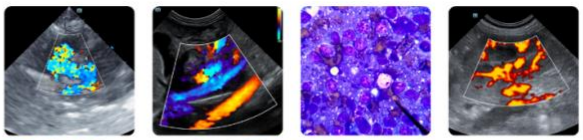

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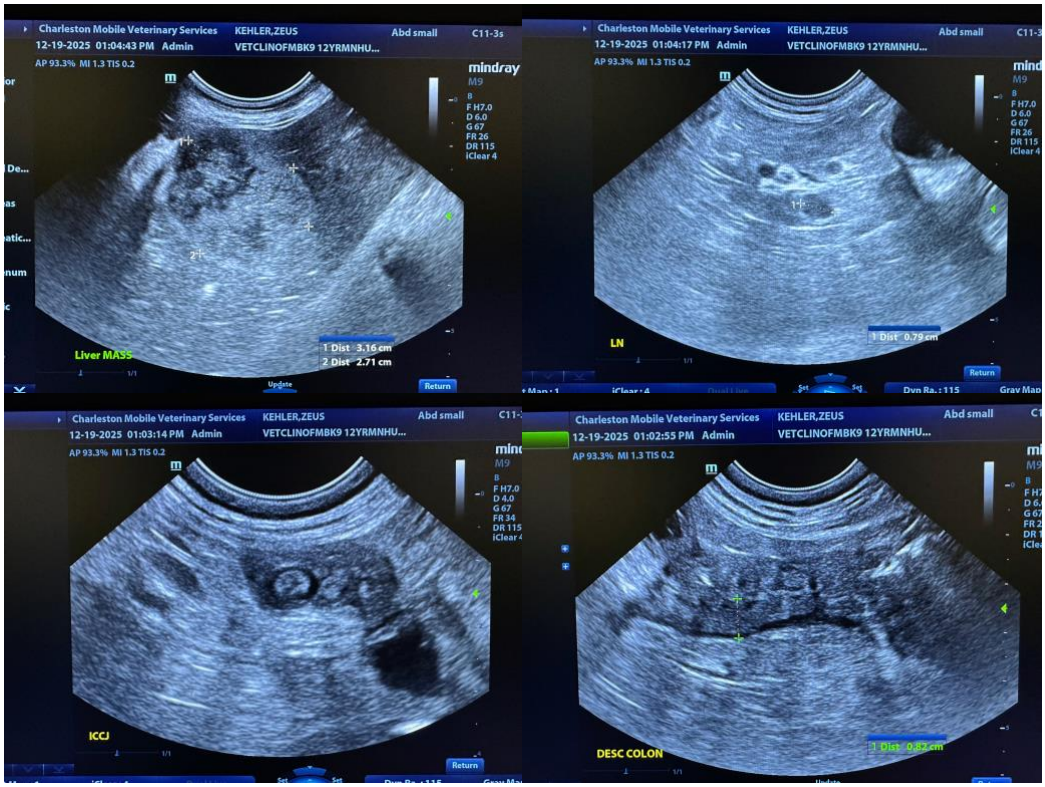


**The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.**

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.

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