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Clinical Sonography & Telecytology
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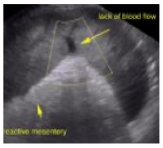
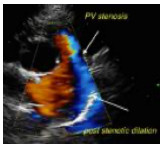
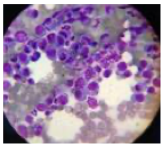
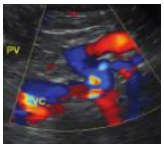

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**PATIENT**

Gracie Conrad

**SPECIES**

Canine

**BREED**

Boxer

**SEX**

Female Spayed

**AGE**

16 years

**WEIGHT**

53 lbs

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Trae Cutchin

**HOSPITAL NAME**

Friendship Springs VC

**REFERRING VET**

Trae Cutchin

**INVOICE**

12348

**DATE**

3.8.23

## PRESENTING CLINICAL SIGNS

History: Acute vomiting 2 to 3 days, unexplained weight loss, no diarrhea.

Abnormal PE/Chem/CBC/UA Results: No significant abnormalities except dental disease. BCS 3 to 4/9. Slight hemoconcentration, slight eosinopenia, slight hypochloremia and slight hypercarbia, moderate increased alkaline phosphatase, +2 protein in concentrated urine (1.039). Radiographs of chest and abdomen do not show any signs I can relate to weight loss or vomiting specifically, except the spleen appears larger than expected; consultation is pending.

The patient was fasted for 12 hours prior to this study.

## 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. The region of the trigone is normal.

The left kidney is normal in size (6.09 cm in length) with a normal shape, architecture and smooth peripheral margins. 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.

The right kidney is normal in size (5.67 cm in length) with a normal shape, architecture and smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with moderate 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 (0.55 cm at cranial pole) (0.48 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.

What is thought to be the right adrenal gland is in normal size (0.84 cm at cranial pole) (0.63 cm at caudal pole) with a normal shape, glandular echogenicity, and detail. Surrounding vasculature appears normal.

### *Spleen*

The spleen is subjectively prominent to enlarged (3.21 cm in width at the level of the hilus) with swollen peripheral margins and rounding at the poles. The parenchyma is subtly mottled in appearance. No distinct focal lesions are observed. Splenic vasculature appears normal with no evidence of thrombosis.

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

The gall bladder lumen is moderately distended. The wall is thin and smooth. A small amount of hyperechoic to mineralized gravity dependent debris is observed within the lumen. The cystic and common bile ducts are normal/not seen.

### *Gastrointestinal*
The gastric lumen is moderately to severely fluid-distended and hypomotile. A small amount of shadowing material is observed within the lumen. The gastric wall is normal in thickness with a normal layering pattern. A 2.00 to 3.00 cm segment of small intestine is thickened (up to 0.65 cm) with a prominent muscularis layer. The remaining small intestinal segments are normal in thickness with a normal layering pattern. The colonic wall is normal.

### *Pancreas*
A portion of the pancreas is obscured by the gastric distention. In the visualized portion no obvious abnormalities are seen.

### *Free Abdomen*
There is no obvious evidence of free fluid. The abdominal lymph nodes are normal/not visible.

### *Other*
A tortuous vessel is observed in the cranial abdomen, just caudal to the stomach, the significance of which is unclear.

## ULTRASONOGRAPHIC FINDINGS

### Primary Findings

- The splenic changes could be consistent with infiltrative neoplasia or a benign process (i.e., lymphoid hyperplasia, extramedullary hematopoiesis, antigenic stimulation, splenitis, other).
- The severe gastric ileus may be functional (i.e., due to underlying gastroenteritis) or a structural cause (i.e., foreign body, tumor). A definitive structural cause is not seen in this study.
- The thickened small intestinal segment may be secondary to an inflammatory process or emerging neoplasia. Alternatively, the segment may represent normal ileum.

### Secondary Findings

- Mild age-related renal and hepatic parenchymal changes

## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- A fine-needle aspirate of the spleen is recommended to assess for infiltrative neoplasia if clotting status is appropriate. A 25-gauge needle should be used.
- Regarding the gastric distention, if a conservative approach is desired, consider symptomatic care with a recheck ultrasound in 12-24 hours to reevaluate the stomach. An intermediate option would be to perform an abdominal CT scan to assess for bowel obstruction. If a more aggressive approach is desired, an abdominal exploratory is an option to evaluate for foreign body/obstruction and to obtain gastrointestinal biopsies.
- Given the proteinuria, a UPC is recommended.


**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)
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