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Clinical Sonography & Telecytology
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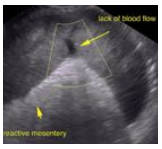
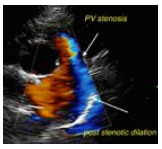
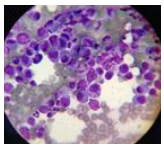
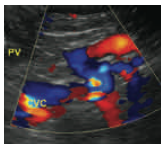

SonoPath.com
1-800-838-4268 info@sonopath.com

PATIENT
Lia Vidal

SPECIES
Canine

BREED
Miniature Schnauzer

SEX
Spayed Female

AGE
12 years

WEIGHT
13 lbs

INTERPRETED BY
Eric Lindquist, DMV DABVP, Cert. IVUSS

IMAGING PERFORMED BY
Dr. Ferrer

HOSPITAL NAME
Paseos VC

REFERRING VET
Dr. Cruz

INVOICE
93104

DATE
11/16/21

PRESENTING CLINICAL SIGNS

History: Lia presented for an abdominal ultrasound as a referral. Pt has been having vomiting for 8 days. BW showed azotemia and changes with electrolytes. Still having vomiting.
Abnormal PE/Chem/CBC/UA Results: PE; Depressed BW: Creatinine 1.9(0.5 - 1.8 mg/dL) BUN 111 (7 - 27 mg/dL) Sodium 125 (144 - 160 mmol/L) Potassium 3.3 (3.5 - 5.8 mmol/L) Chloride 89 (109 - 122 mmol/L) Total Protein 8.5 (5.2 - 8.2 g/dL) CBC: Mild leukocytosis 4DX: All Negative

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The **urinary bladder**, trigone, and pelvic urethra presented normal thicknesses and normal tone. The ureters were not visible which is normal. No uroliths or sediment were visualized and anechoic urine was present. No evidence of inflammatory or neoplastic changes was noted. Ureteral papillae were normal.

The **kidneys** revealed largely normal size and structure, corticomedullary definition and ratio (cortex 1/3 of medulla) were essentially maintained with some age-related loss of curvilinear patterns regarding the capsule and C/M junction. The cortices presented largely uniform texture with some increased echogenicity expected for this age patient. Medullary structure differed distinctly from that of the cortex. Slight mineralization was noted in both kidneys. The left kidney measured 4.54 cm. The right kidney measured 5.2 cm with trace pyelectasia.

Adrenal Glands

Both **adrenal glands** were visualized and recognized as having normal shape, size, position and echogenicity for this breed. The phrenic vasculature, glandular echogenicity and detail were unremarkable. Capsule, cortex, and medullary definition were normal for this age patient. The right adrenal gland measured 0.5 cm. The left adrenal gland measured 0.56 cm.

Spleen

The **spleen** in this patient was mildly enlarged with uniform parenchyma and was folded upon itself caudally owing to gastric dilation. This is a positional variant and is not pathological. There was no evidence of significant disease.

Liver

The **liver** images submitted revealed subjectively normal liver size, contour, and structure. Parenchymal echogenicity was naturally coarse and hypoechoic to the spleen. Vascular and biliary tracts were of normal volume with no evidence of congestion. The gallbladder presented acceptably thin walls with primarily anechoic content. The cystic and common bile ducts were normal. No pathological hepatic lymphadenopathy was evident. No overt structural evidence of inflammatory, infiltrative or regenerative pathology was evident.

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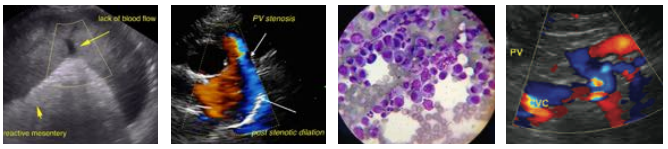

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Gastrointestinal

The stomach revealed upper gastrointestinal stasis. Minor, increased submucosal echogenicity and thickening was noted throughout portions of the small intestine. This is possibly indicative of underlying chronic disease. A jejunal, hard foreign body was noted and measured 2.5 cm. There were some areas of mucosal fogging noted in the small intestine. This may be indicative of early lymphangiectasia. Regional inflammation was noted around the foreign body. A slight amount of free fluid was noted.

Pancreas

Heterogenous **pancreatic** changes were noted.

ULTRASONOGRAPHIC FINDINGS

Intestinal foreign body, consistent with a hard ball, hazelnut or similar material.

Mild, chronic GI changes.

Otherwise, age related abdominal changes.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Immediate exploratory surgery is indicated with concurrent GI biopsies at the time of enterotomy to manage underlying disease.

According to Sonopath research presented at ECVIM 2016 (Stockholm, Sweden), Advances in Small Animal Medicine and Surgery (May 2017), and EVDI 2017 (Verona, Italy), concurrent underlying chronic inflammatory neoplastic intestinal disease can often reside in PICA patients. Therefore, surgical biopsies are essential in this case regardless of the exploratory findings.

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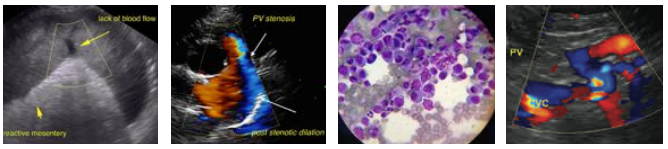

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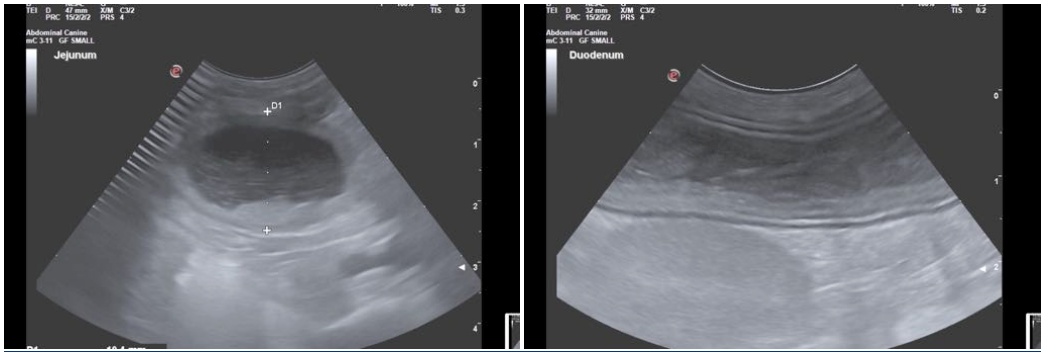

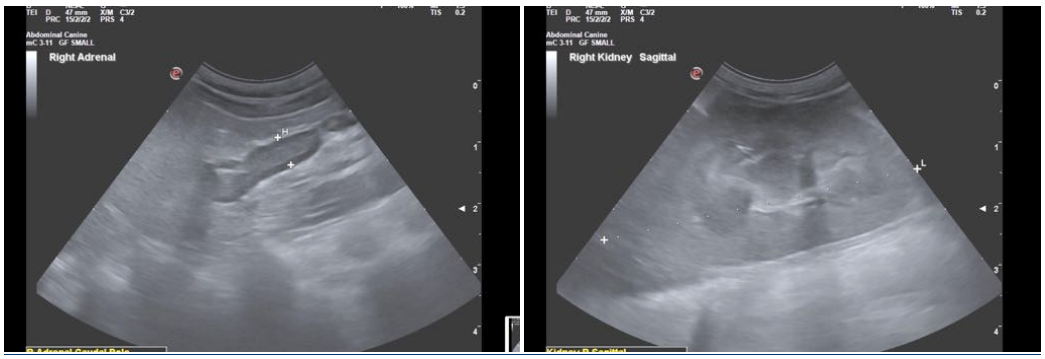

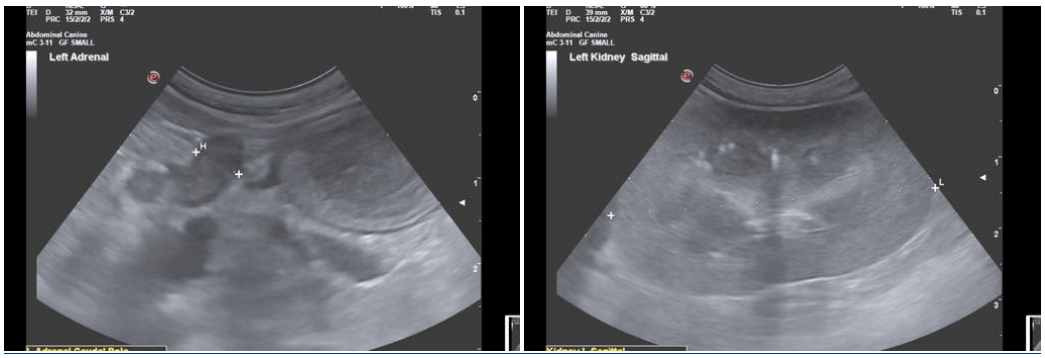

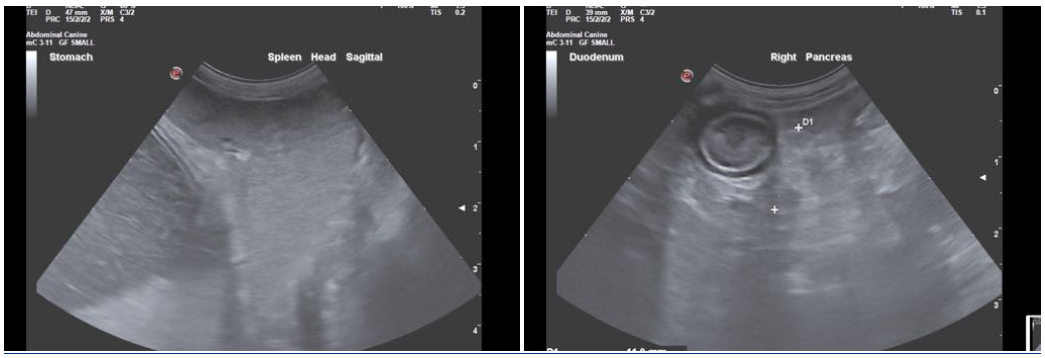

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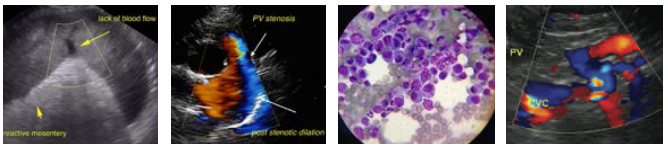

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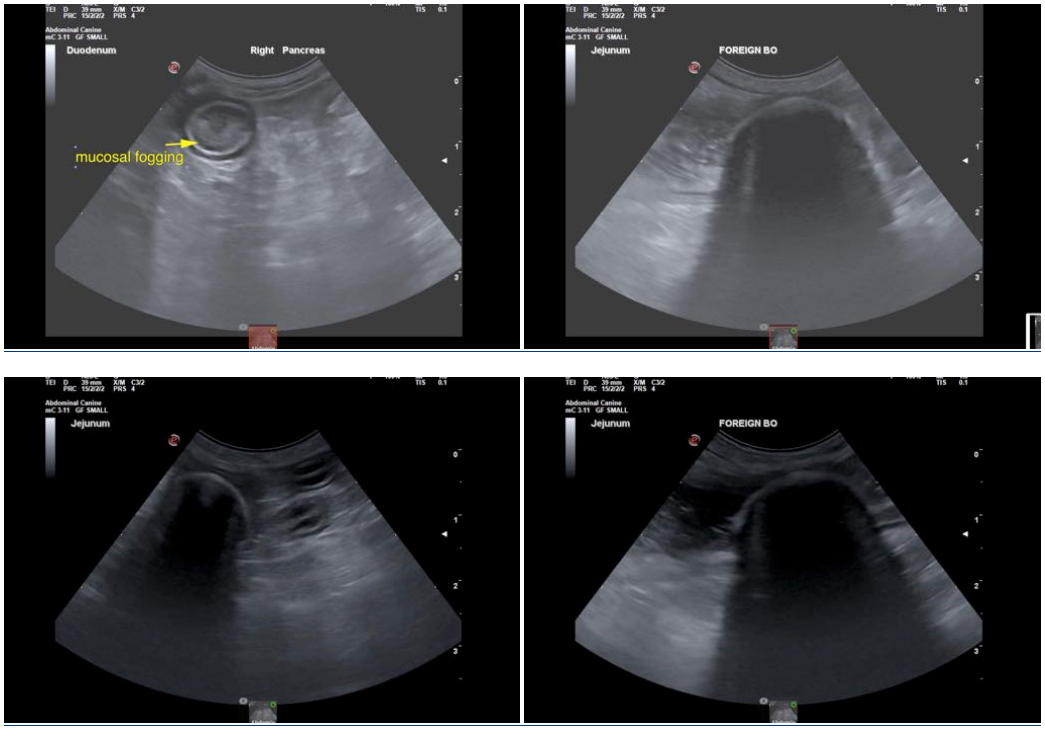

The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

Eric Lindquist, DMV, DABVP, Cert. IVUSS, CEO of SonoPath.com
info@SonoPath.com