

**DATE PRESENTING CLINICAL SIGNS**

9/3/21

History: Date: 09-02-2021 Notes: Not eating, vomiting. Referral concerned for GI obstruction. rDVM performed x-rays and Chem 17 and started on IVF and sent here ATO. Assessment: Vomiting- severe, diarrhea, severe dehydration, severe abdominal pain, severe DI - hx of ingestion of steak. DDX: DI leading to severe gastroenteritis vs pancreatitis vs IBD vs neoplasia vs other FB less likely. **Plan: Recommend to Owner** Hospitalization, IV catheter, fluid therapy, and further treatment as needed (rDVM lab work and x-rays).

**PATIENT**

Toby Goins

Glucose checks Q6

**SPECIES**

Canine

HCT checks Q12, Lytes Q12, Australian Shepherd. Owner authorizes recommended treatment. **Prognosis:** Guarded: Risk for decline and death

**BREED**

**Physical Exam: General Appearance: Depressed Body Condition Score: 7 /9, Hydration: 8-10%** dehydration.

Bichon Frise

Current Medications: Vitamin B Complex Injection (Per mL), Dextrose 50% Solution Injection (Per mL), Amp/Sulb (Unasyn) 1.5gm Injection (Per mL), Metronidazole 5mg/mL Injection (Per mL), Pantoprazole (Protonix) 40mg/vial Injection (Per mL), Provable Kit - Feline/Small Dog, Maropitant Citrate (Cerenia) 10mg/mL Solution Injection (Per mL), Buprenorphine 0.6mg/mL.

**SEX**

Intact Male

Lab Results: RDVM lab work- Chem 17. Dehydration, low BG (57).

**AGE**

2016

Animal Emergency Hospital lab work: (9/2/21): Glucose 79. (9/3/21):

Glucose 57, PCV 57 %, TS 6.8 g/dL.

Radiographs: rDVM x rays- very gas dilated bowel loops. AFAST/TFAST: no FF.

Date of Previous IntraPet Ultrasound: No previous IntraPet scans.

Sedation: not needed

Stat Report: not requested

**WEIGHT**

17.4 Pounds

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN****INTERPRETED BY**

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

**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 large in size measuring 2.08 cm x 3.47 cm. It has a fairly regular shape with smooth external margins. The parenchyma is heterogeneous, and there is a 0.7 cm hypoechoic cyst visualized. The prostatic urethra appears normal with no evidence of irregularity, invasion of mass effect, or calculi.

**HOSPITAL NAME**

Animal Emergency  
Hospital

The left kidney has a normal shape and size (4.93 cm) with mild pyelectasia of 0.26 cm. Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. There is no evidence of nephroliths, infarcts or hydroureter. Renal vasculature is normal.

**REFERRING VET**

Dr. Kalwa

The right kidney has a normal shape and size (4.63 cm) with mild pyelectasia of 0.22 cm. Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. There is no evidence of nephroliths, infarcts or hydroureter. Renal vasculature is normal.

**INVOICE**

25192

**Adrenal Glands**

The left adrenal gland is normal in size measuring 0.6 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 0.48 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 subjectively normal in size, echotexture is homogenous, and the splenic capsule is smooth with no irregularities. The blood flow through the hilus and splenic parenchyma appears normal. No focal parenchymal abnormalities are visualized.

### ***Liver***

The liver is subjectively normal in size, and echogenicity with smooth peripheral margins. The parenchyma is homogenous echotexture. The visible portions of the vasculature and biliary tract appear normal. No focal nodules or cystic lesions are observed.

The gallbladder lumen is moderately distended. The wall of the gall bladder is not thickened and has a smooth mucosal surface. Luminal contents are primarily anechoic. The cystic and common bile ducts are normal/not visible.

### ***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 uniform diameter with minimal fluid distension. Wall appears subjectively, mildly increased. Bowel loops follow a typical curvilinear path with distinct wall layering. Duodenum wall measures 0.42 cm. Jejunum wall measures 0.38 cm, 0.35 cm, 0.25 cm. Visualized peristalsis appears appropriate. While no discrete bowel masses are visualized, and no obvious foreign material, there are several sections of small intestine that display some fluid dilation and a corrugated appearance, most consistent with focal inflammation/enteritis.

The ileocecal junction appears prominent. It exhibits normal intact wall layering and is subjectively of normal thickness. The colon appears dilated with fluid material and gas. The proximal colon appears fluid dilated. There is no observed focal or generalized colon wall thickening or loss of layering.

### ***Pancreas***

The pancreas is prominent and mottled compared to the surrounding isoechoic 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. There is a mild lymphadenopathy present. A prominent mesenteric lymph node is visualized measuring 0.37 cm. 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 around the abnormal bowel loops.

### ***Other***

Both testicles are imaged and appear normal.

## **PRIMARY FINDINGS**

- Large, hyperechoic prostate with small prostatic cyst – Prostatic changes are most consistent with benign prostatic hyperplasia. Other differentials include bacterial prostatitis and prostatic neoplasia. However, given the lack of lower urinary tract symptoms, these differentials are considered less likely in this patient.

- Mottled, prominent pancreas – The pancreatic changes are most consistent with mild pancreatitis or a recent episode of pancreatic inflammation.
- Subjectively thickened small intestine with focal areas of fluid dilation and a corrugated appearance – most consistent with severe enteritis, but a partial obstruction cannot be ruled out. Correlate with radiographic findings.
- Mild mesenteric lymphadenopathy – The prominent abdominal lymph nodes are most consistent with reactive lymphadenitis or lymphoid hyperplasia. Neoplastic infiltration is considered less likely.

## SECONDARY FINDINGS

- Mild bilateral pyelectasia of the kidneys – Pyelectasia of the kidneys could be consistent with pyelonephritis, chronic renal disease, secondary to PU/PD or fluid therapy (if applicable), other.

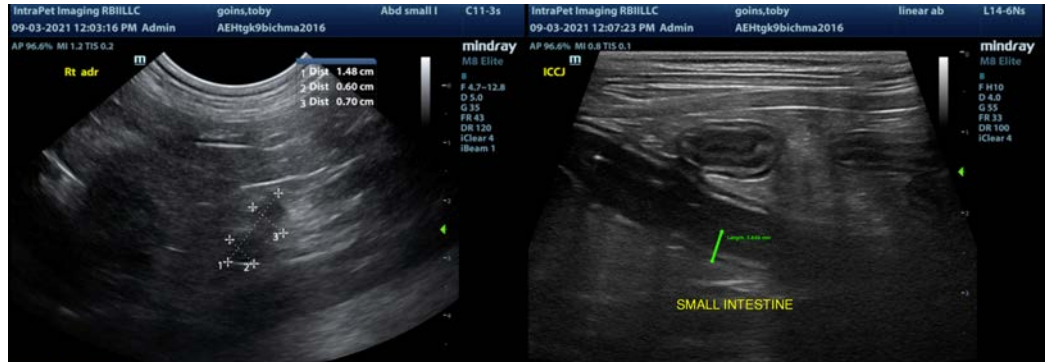
## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The bowel observed appears somewhat dilated and inflamed. Additionally, the colon is fluid dilated, consistent with the diarrhea reported. Findings are most consistent with severe enteritis possibly due to dietary indiscretion, but foreign material cannot be excluded. Correlate with radiographs findings. Also recommend a quantitative PLI, B12 and folate evaluation to look for evidence of pancreatitis and a B12 deficiency/bacterial overgrowth.

- Recommend symptomatic therapy for gastroenteritis/pancreatitis.
- Recommend starting a probiotic.
- Recommend screening for GI parasites.
- Recommend serial radiographs +/- barium to help rule out possibility of foreign material.
- When this patient is feeling better, recommend neutering. Recommend urinalysis and culture to rule out prostatitis.
- Recommend ACTH stim test due to current symptoms, age and hypoglycemia.







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.

Kathleen Sennello DVM,MS, Diplomate ACVIM (Small animal Internal Medicine)  
kathleen.sennello@sonopath.com