**DATE PRESENTING CLINICAL SIGNS**

9/24/21

History: Presenting Complaint: Vomiting with Blood. Date: 09-11-2021 Notes: History of intermittent vomiting; sometimes after eating grass. Assessment: Vomiting; r/o gastroenteritis, pancreatitis, GI obstruction, ileus, neoplasia. Plan: Owner prefers OP treatment if possible: Bloodwork (CBC/Chem 17/Lytes/UA), SQ fluids, Cerenia if no evidence of obstruction -Further treatment tbd by diagnostics.

**PATIENT**

Turtle Brown

Current Medications: Buprenorphine, Metronidazole, Cerenia. Omeprazole.

**SPECIES**

Feline

Lab Results: Attached separately.

Radiographs: No evidence of obstruction. Stool in colon. Small gas bubbles throughout intestine; may possibly be from presence of hairballs.

**BREED**

Domestic Shorthair

Date of Previous IntraPet Ultrasound: No previous IntraPet scans.

**SEX**

Female Spayed

Sedation: Sedation not required for scan.

Stat Report: STAT report not requested by the veterinarian.

**AGE**

9/11/10

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN****Urinary System**

The urinary bladder, trigone, and pelvic urethra are 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. Ureteral papillae and visualized portion of the proximal urethra, visible to a depth of 2 cm, are normal.

**WEIGHT**

11 lbs.

The left kidney is normal size (3.51 cm in length) with a slightly irregular shape. There is a normal 1:3 cortex to medulla ratio with minimal to mild loss of corticomedullary distinction. One to two small nephroliths are visualized. There is no evidence of pyelectasia or hydroureter.

**INTERPRETED BY**

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

The right kidney is normal size (3.84 cm in length) with a slightly irregular shape. There is mild loss of corticomedullary distinction. Several hyperechoic shadowing diverticular foci are observed. A small infarct is suspected at the lateral aspect. There is no evidence of pyelectasia or hydroureter.

**HOSPITAL NAME**

Animal Emergency  
Hospital

**Adrenal Glands**

The region of the left adrenal gland is evaluated. No obvious pathology is observed.

The right adrenal gland is normal size (0.46 cm width). Normal shape and glandular echogenicity. The phrenicoabdominal vein and surrounding vasculature are normal.

**REFERRING VET**

Dr. Martinoli

**Spleen**

The spleen is subjectively prominent in size (1.12 cm in width at the level of the hilus) with normal curvilinear peripheral contours. There is appropriate echogenicity and echotexture. No focal lesions are observed. Splenic vasculature is normal.

**INVOICE**

11897kk

**Liver**

The liver is subjectively normal in size with normal contours and structure. There is appropriate echogenicity and echotexture. No overt structural evidence of inflammatory, infiltrative, or regenerative pathology is evident. Vascular and biliary tracts are of normal volume with no evidence of congestion. No pathological hepatic lymphadenopathy observed. The gall bladder lumen is moderately distended. The wall is thin and

smooth. A small amount of aggregated, echogenic, mostly gravity-dependent debris is observed within the lumen. The cystic and common bile ducts are normal/not seen.

### ***Gastrointestinal***

The stomach and intestine are free of stasis and exhibit normal peristaltic activity. The gastric lumen is not distended. The gastric wall and pylorus are normal in thickness with a normal layering pattern. The pyloric outflow tract is patent. The small intestinal lumen is not dilated. The small intestinal wall is normal to mildly thickened (up to 0.38 cm) with a normal layering pattern and appropriate mural detail. There is disruption in the normal 1:3 muscularis: mucosal ratio in most segments. Discreet masses are not identified. The ileocecal colic junction and colonic wall are normal. No obstructive disease is noted.

### ***Pancreas***

The right limb of the pancreas is visible/prominent with normal curvilinear peripheral contours. The parenchyma is hypoechoic relative to surrounding omental fat. The pancreatic duct is visible but not overtly dilated. There is no evidence of peripancreatic inflammation or effusion.

### ***Free Abdomen***

The peritoneal cavity is normal. There is no evidence of inflammation or effusion. The abdominal lymph nodes are normal/not visible.

## **ULTRASONOGRAPHIC FINDINGS**

### **Primary Findings:**

- Bowel pattern consistent with inflammatory bowel disease. However, there is potential for emerging lymphoma.
- The pancreatic changes may be a normal variant for this patient or could be consistent with mild, chronic pancreatitis. Correlation with clinical findings is recommended.

### **Secondary Findings:**

- Bilateral nephropathy with left non-obstructive nephroliths and right dystrophic mineralization.
- The splenic parenchyma changes are most consistent with a benign process such as lymphoid hyperplasia, extramedullary hematopoiesis or splenitis with a low possibility of infiltrative neoplasia (i.e., lymphoma, mast cell neoplasia).

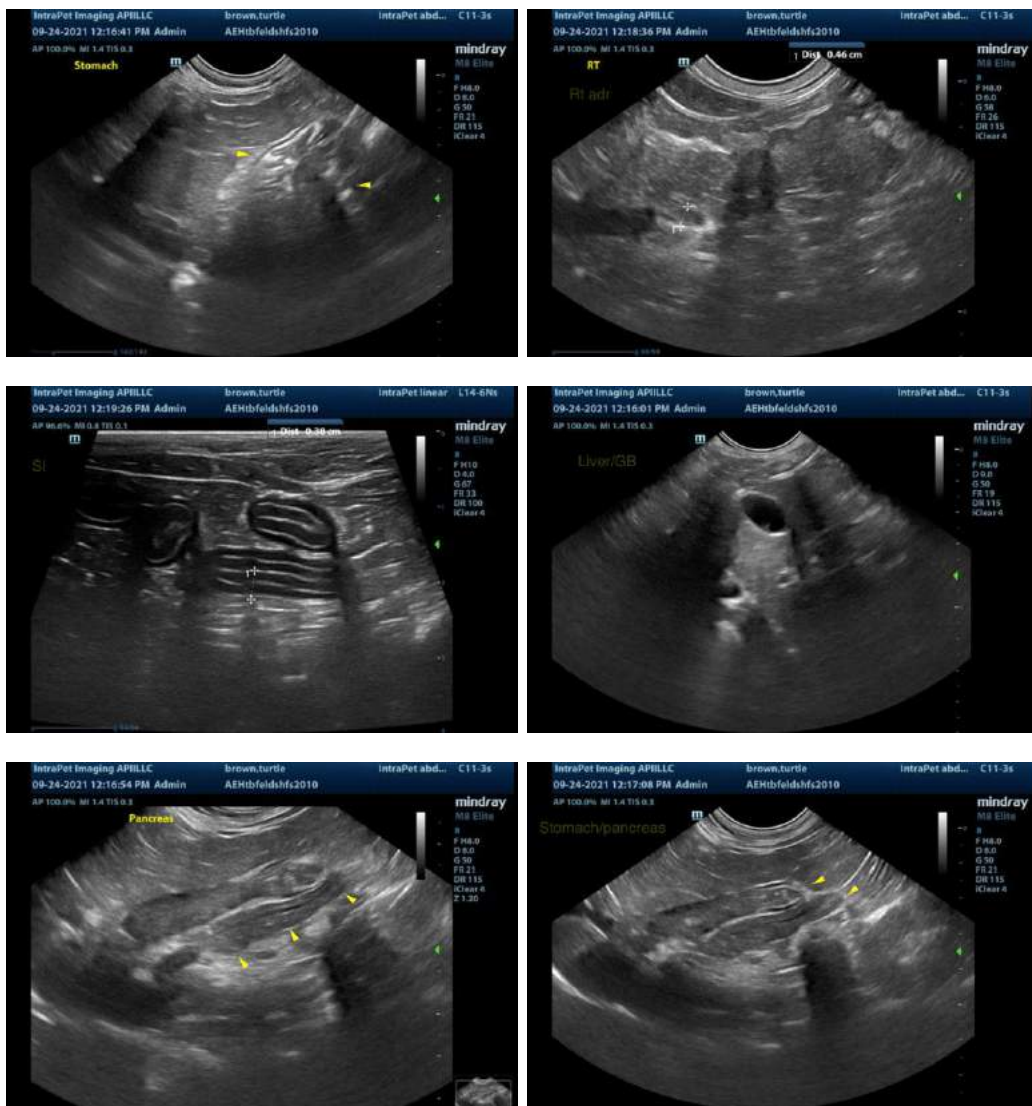
## **INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

The following diagnostic/treatment recommendations can be considered:

1. Serum cobalamin, folate, PLI and TLI
2. A fecal evaluation for ova/Giardia
3. A 6-week limited antigen diet trial to assess for food allergies
4. For patients where chronic vomiting is present but additional diagnostics are not to be performed, consider triple therapy as empirical treatment for *Helicobacter* gastritis:
  - a. Amoxicillin: 10-22 mg/kg PO q 12 hours x 14-21 days
  - b. Metronidazole: 10-15 mg/kg PO q 12 hours for 14-21 days
  - c. Omeprazole: 0.7 mg/kg PO q 24 hours for 14-21 days

d. (+/- the addition of Bismuth subsalicylate: 3.85 mg/kg PO q 6-8 hours x 14-21 days)

5. Also consider heartworm antigen and antibody testing as heartworm disease can be a cause of chronic vomiting in cats.
6. Three-view thoracic radiographs are recommended to assess for occult esophageal disease.
7. If the above diagnostics/therapeutics are inconclusive, endoscopic, or surgical gastrointestinal biopsies may be warranted.





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.

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