GASTROINTESTINAL DISEASES OF CATS

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- Signalment and History
- Characterizing Diarrhea
- Differential Diagnoses (Extragastrointestinal vs Gastrointestinal)
- Physical Exam
- Diagnostic Tests
- •Select Treatments

SIGNALMENT AND HISTORY

- Age
- Inside only vs outside access
- Diet
 - Cat food?
 - Any change in diet?
 - When was it last purchased?
 - Access to any people food?
 - Any predation?
 - Any exposure to toxins (chemicals or plants)?
 - Any habit of chewing/swallowing foreign objects?
- Vomiting only, diarrhea only, or both
- Characterize vomit and/or diarrhea
- How long? Frequency? Any change over time?
- Any other cats (or other pets) showing similar signs?





CHARACTERIZING DIARRHEA

- Acute (<3 weeks)
- Non-serious
- Small Bowel

• For acute, non-serious diarrheatreat with symptomatic care

- Chronic (>3 weeks)
- Serious (>10% loss of body weight, 3-5% dehydration, hemorrhagic diarrhea, electrolyte disturbances, T>104 F)
- Large Bowel

- Treatment trial for acute, non-serious vomiting/diarrhea
 - Fenbendazole (nematodes and Giardia) 25 mg/kg po SID for 5 day, repeat in 2-3 weeks
 - Metronidazole (anerobic antimicrobial, antiprotozoal, some anti-inflammatory benefit) 25 mg/kg/day (for diarrhea)
 - Highly digestible diet
 - Antiemetic (if needed)- maropitant 2 mg/kg SID
 - Anti-diarrheal agent (if needed)- loperamide 0.08-0.16 mg/kg PO BID







SMALL BOWEL VERSUS LARGE BOWEL DIARRHEA

Parameter

Frequency Volume Blood Mucus

Straining

Urgency

Weight Loss

Small Bowel

2-3 times normal
Increased
Melena
Absent
Absent
Normal or Increased
Common

Large Bowel

>5 times normal Normal or Decreased Frank

+/- Present

Present

Increased

Occasional



SMALL BOWEL VERSUS LARGE BOWEL DIARRHEA

Parameter

Borborygmus Flatulence Vomiting Appetite Albumin Globulin Cholesterol

Small Bowel

Yes Yes Yes Variable Normal to decreased Normal to decreased Large Bowel

No No

Infrequently

Unaffected

Normal

Normal

Normal

DIFFERENTIAL DIAGNOSIS (EXTRAGASTROINTESTINAL)

- Renal Failure
- Hyperthyroidism
- Hepatic disease
- Pancreatitis
- Complicated Diabetes
- Neoplasia
- FIV/FeLV related disease

DIFFERENTIAL DIAGNOSIS (GASTROINTESTINAL) Diarrhea

Vomiting

- Parasites
- Food allergy or intolerance
- Inflammatory Bowel Disease (IBD)
- Intestinal lymphoma (small cell vs large cell) or other GI neoplasia
- Toxins
- Helicobacter
- Obstruction (foreign body, neoplasia, intussusception, stricture)
- Constipation

- Parasites
- Food allergy or intolerance
- Inflammatory Bowel Disease (IBD)
- Intestinal lymphoma (small cell vs large cell), or other GI neoplasia
- Toxins
- Salmonella, Campylobacter
- Feline Panleukopenia (FPV)
- Exocrine Pancreatic Insufficiency (EPI)

PHYSICAL EXAM

- Look under the tongue for a string (foreign body as cause of vomiting)
- Palpate thyroid
- Palpate for intestinal thickness, mass, or foreign body



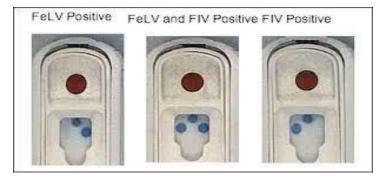




DIAGNOSTIC TESTS (EXTRAGASTROINTESTINAL)

- FIV/FeLV test
- Complete Blood Count (CBC)
- Chemistry Panel with T4
- Spec fPL
- Urinalysis
- Ultrasound
- Radiogrphs





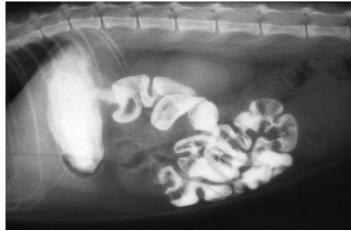
EXPECTED RESULTS

- Renal Failure (decreased USG, increased SDMA, CR, BUN, electrolyte disorders, anemia)
- Hyperthyroidism (increased total T4, ALT, ALP)
- Hepatic disease (hyperbilirubinemia, decreased BUN, increased ALT, ALT and GGT, bilirubinuria)
- Pancreatitis (Increased fPL, ALT, ALP, leukocytosis, anemia, changes on ultrasound)
- Complicated Diabetes (glucosemia, glucosuria, ketonuria, electrolyte disorders)
- Neoplasia- palpation, radiographs, ultrasound
- FIV/FeLV related disease (FeLV antigen positive or FIV antibody positive)

DIAGNOSTIC TESTS (GASTROINTESTINAL)

- Fecal (roundworms, hookworms, whipworms, coccidia)
- Cryptosporidium/Giardia
- Fecal culture (Salmonella, Campylobacter)
- FPV antigen test (and CBC-leukopenia)
- Elimination diet trial for food allergy (hydrolyzed vs novel protein)
- GI Panel (TLI, cobalamin, folate)
- Radiographs (+/- barium contrast) for foreign body or larger masses
- Ultrasound (intestinal thickness, gastrointestinal nodules/masse)
- Endoscope for suspected gastric foreign body (+/- removal) or gastric biopsy (Helicobacter)
- Gastrointestinal biopsies for IBD and lymphoma, Helicobacter (other neoplasia)
 - Endoscopic-partial thickness
 - Surgical-full thickness





- ALWAYS DEWORM!
- Hookworms, roundworms, physaloptera
 - Fenbendazole 25 mg/kg PO for 3 days, repeat in 2-3 weeks
 - Pyrantel pamoate 20 mg/kg PO, repeat in 2-3 weeks
- Coccidia- sulfadimethoxine 50 mg/kg PO SID for 2-3 weeks
- Cryptosporidium-tylosin 20-40 mg/kg PO BID







- Giardia- fenbendazole 25 mg/kg PO SID for 5 days or metronidazole 25 mg/kg PO SID for 5 days
- Salmonella, Campylobacter-enrofloxacin 5 mg/kg PO SID for 7-10 days,
- Helicobacter (treat for 3 weeks)
 - Antiacid-famotidine 0.5 mg/kg PO BID
 - And any two of the following- amoxicillin (20 mg/kg PO BID), bismuth subsalicylate (5 mg/kg PO BID), doxycycline (5 mg/kg PO BID), metronidazole (12.5 mg/kg PO BID)









- Feline Panleukopenia
 - Isolate
 - IV fluids
 - Broad spectrum antibiotic (amoxicillin/clavulanic acid)
 - Highly digestible diet







• Food allergy-hydrolyzed or novel protein diet and NOTHING else







- Exocrine pancreatic insufficiency (rare)- pancreatic enzymes and cobalamin if needed
- Foreign body- endoscopic or surgical removal (cut string under tongue if present)



• IBD

- Novel protein diet or hydrolyzed protein diet
- Prednisolone
 - 1-3 mg/kg/day to begin (may need subcutaneous dexamethasone if not being absorbed)
 - Once clinical signs improve, taper every 3-4 weeks
 - Maintain at lowest effective dose
- Cobalamin supplementation if needed- 250 mcg SC weekly for 6 weeks (then retest)







- Intestinal small cell lymphoma
 - Cyclophosphamide 25 mg tablet PO every 3 weeks- check CBC (can cause myelosuppression) prior to each dose for 3 times and then every 4-6 months
 - Prednisolone 5mg- 1/2 tablet PO every other day
 - Cobalamin supplementation if needed 250 mcg SC weekly for 6 weeks (then retest)







QUESTIONS?