Canine Inflammatory Bowel Disease

A definitive diagnosis of inflammatory bowel disease requires histopathology and ruling out other diseases. Therefore other diagnostics and therapies should be done prior to a definitive diagnosis of IBD. Common differential diagnosis for chronic vomiting and diarrhea in an otherwise healthy appearing dog include food-responsive diarrhea, antibiotic-responsive diarrhea, intestinal parasites, neoplasia, and infectious causes (bacterial, fungal, algal). Other diseases causing chronic vomiting and diarrhea such as EPI, chronic pancreatitis, endocrine diseases, renal disease, and liver diseases should be investigated.

Recommended Diagnostics

- Thorough dietary history
- Fecal floatation and direct fecal smear to look for parasites
- A baseline cortisol can rule out Addison's if >2.0 µg/dl
- A rectal scrape can be performed for large bowel cases and may reveal Prototheca, histoplasmosis, or lymphoma
- GI panel (TLI, qPLI, folate, cobalamin) if within budget
- CBC, chemistry – to rule out other diseases
    - (These could also be excluded if needed due to budget)
    - At minimum, a PCV/TS can be helpful. With IBD, one of the biggest concerns is albumin and (less commonly) globulin levels. If albumin or both albumin/globulin are low, the severity of the condition is worse and warrants aggressive treatment.

Treatment:

- Initial treatment to rule out other diseases:
    - Fenbendazole – 50mg/kg PO q24h for 3 days
    - Antibiotics – metronidazole (10–15 mg/ kg PO q 12 h), tylosin (25 mg/kg PO q 12 h), or tetracycline (20 mg/ kg PO q 8 h) for 2–6 weeks
    - Diet elimination trial (hydrolyzed protein or novel protein) for at least 2-4 weeks
    - If suspect lymphangiectasia based on breed (Yorkshire terriers and Rottweilers), try a low fat prescription or home-cooked (boiled chicken/rice) for 2-4 weeks
    - If suspect EPI (especially if German Shepherd), and TLI not affordable, consider a trial of Viokase or Pancreazyme

        - Other, “older” (but less sensitive/specific) methods of diagnosing EPI are published, including the x-ray film digestion test and the plasma turbidity test. Please contact MSU-CVM for further information.
- Supportive care/other things to try before immunosuppressives:
    - Antiemetics – Cerenia, ondansetron
    - GI protectants – omeprazole (1 mg/kg q12) and sucralfate (if treating suspect GI ulcer)
    - Probiotics – Proviable, Fortiflora, VSL3 (Visbiome)
        - For Visbiome: 1 capsule if <20 kg; 2 capsules if >20 kg
    - Cobalamin supplementation (250-1200 mcg per dog, SQ once weekly × 6 weeks, then q 14 d × 6 weeks, then monthly)
        - Certain breeds may have congenital cobalamin deficiency (Giant Schnauzers, beagles, Border collies, etc) and may need daily supplementation for control of diarrhea
    - Fecal transplant
        - May require more than one for best response (see MSU-CVM website for instructional video)
    - Fiber supplementation (especially for large bowel diarrhea)
        - Toy breed: ½ TBS daily
        - Small breed: 1 TBS daily
        - Medium breed: 2 TBS daily
        - Large breed: 3 TBS daily
    - Long term tylosin
        - <10 lbs: 1/16 tsp BID
        - 10-25 lb: 1/12 tsp BID
        - 26-50 lb: 1/8 tsp BID
        - >50 lb: ¼ tsp BID
- IBD treatment if signs not resolved with previous treatments:
    - Immunosuppressives
        - Before using steroids for presumptive IBD without biopsies, obtain owner consent to risk and recommended urine histo/blasto antigen testing and rectal scrape to rule out infectious causes as best as possible
        - Steroids – 2mg/kg PO q24h then taper to lowest possible dose; do not taper until clinical signs resolved for at least 2 weeks and/or albumin normalized
    - Diet – hydrolyzed protein, novel protein, or low fat diet
        - For Irish Setters, try gluten free diets
    - Antibiotics (long term) – tylosin powder or metronidazole