Microscopic Colitis

Background

1. Definition
    - Chronic inflammatory bowel dz encompassing both lymphocytic colitis and collagenous colitis[1]
2. General info
    - Collagenous colitis
        - Thickening of subepithelial basement membrane of colonic mucosa w/a band of collagen
    - Lymphocytic colitis
        - Intraepithelial lymphocytosis w/o collagen thickening

Pathophysiology

1. Pathology of dz
    - Not completely known
    - Normal radiologic and colonoscopic appearance of colon
    - Abnormal histologic appearance of colon
    - Leads to chronic watery diarrhea w/o bleeding
2. Incidence/ prevalence
    - Incidence of 10 per 100,000 person-yrs
        - Lymphocytic: 5.4 per 100,000
        - Collagenous: 4.6 per 100,000[2]
    - Prevalence of 103 per 100,000 person-yrs
        - Lymphocytic: 63.7 per 100,000
        - Collagenous: 39.3 per 100,000
3. Risk factors
    - Pt characteristics[2]
        - Older age
        - Female
    - Assoc autoimmune dz[4]
        - Hypothyroidism
        - Celiac dz
        - Diabetes mellitus
        - Rheumatoid arthritis
        - Asthma
        - Allergies
4. Morbidity/mortality
    - Not assoc w/incr mortality or severe deterioration
    - No incr risk of neoplasia

Diagnostics

1. History
    - Intermittent, chronic, non-bloody, watery diarrhea
    - Diarrhea up to 2 L or 4-9 episodes/d
    - Vague abdominal pain
    - Fecal urgency
    - Wt loss

- Fatigue
- Nausea

2. Physical exam
   - Unremarkable
   - Vague abdominal tenderness
   - Wt loss
3. Diagnostic testing
   - Laboratory evaluation
     - ESR may show slight elevation
     - Autoantibodies found in half of pts
       - RF, ANA, antimitochondrial antibodies, and anti-neutrophil cytoplasmic antibodies
     - Tissue transglutaminase antibody or antiendomysium antibody to rule out celiac dz
     - Stool culture to rule out infectious cause
     - Incr levels of stool inflammatory markers
       - Eosinophil protein X, myeloperoxidase, and tryptase
   - Diagnostic imaging
     - Normal radiologic appearance of colon
   - Other studies
     - Normal colonoscopic appearance of colon
     - Colon biopsy for Dx
       - Number and location of biopsies not established
       - Proximal biopsies improve sensitivity

Differential Dx

1. Key DDx
   - Irritable bowel syndrome
   - Ulcerative colitis
   - Crohn's dz
   - Diverticulitis
   - Ischemic colitis
   - Drug-induced colitis
   - Infectious colitis
   - Lactose intolerance
   - Celiac dz
2. Extensive DDx
   - Hyperthyroidism
   - Carcinoid syndrome
   - VIPoma
   - Colon cancer
   - Other causes of abdominal pain and chronic diarrhea

Therapeutics

1. Reassure pt:
   - Dz has not been assoc w/colonic neoplasia, incr mortality, or severe deterioration
2. Discontinue any offending drugs

3. Budesonide
    - Start at 9 mg/d for 4 wk
    - Treat over a 6-8 wk period
    - If in remission
        - Taper to 6 mg for 2 wk
        - Then 3 mg for 2 wk
        - Then discontinue
    - May continue dose of 9 mg/d for 12 wks before tapering if Sx are not controlled or if Sx recur on tapering[7,8]
4. Bismuth subsalicylate
    - Nine 262 mg tablets daily in 3 divided doses for 8 wk trial is reasonable in pt w/collagenous colitis[7]
5. Mesalamine
    - 800 mg TID w/or w/o cholestyramine
    - 4 g daily may be effective for pts w/active collagenous or lymphocytic colitis[7,8]
6. Loperamide
    - May be used for symptomatic Tx of diarrhea
7. Boswellia serrata extract, prednisolone and probiotics
    - No evidence on effectiveness
8. Surgery
    - Rarely recommended or reported
    - Ileostomy may be procedure of choice in older pts w/severe, resistant disorder

Follow-Up

1. Return to office
    - As needed if not responding to Tx
2. Refer to specialist
    - Not indicated unless refractory to Tx
3. Admit to hospital
    - Only if unable to manage as outpatient (rare)

Prognosis

1. Dz course variable w/alternating remissions and relapses
    - Good long-term prognosis
2. Not assoc w/incr mortality or severe deterioration
3. 80% resolve spontaneously in less than 3 yrs[5]
4. Recurrence is common despite Tx[9]
5. No incr risk of neoplasia

Prevention

1. Limit drugs assoc w/dz
2. Limit dietary factors that may exacerbate condition
    - Caffeine, alcohol, dairy products

Patient Education

1. http://digestive.niddk.nih.gov/ddiseases/pubs/collagenouscolitis/

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