Colon

Microscopic Colitis

Background

1. Definition
   - Chronic inflammatory bowel dz encompassing both lymphocytic colitis and collagenous colitis
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 and prevalence
   - Incidence of 10 per 100,000 person-years
     - Lymphocytic: 5.4 per 100,000
     - Collagenous: 4.6 per 100,000 [2]
   - Prevalence of 103 per 100,000 person-years
     - 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
    - Weight loss
    - Fatigue
    - Nausea
2. Physical exam
    - Unremarkable
    - Vague abdominal tenderness
    - Weight loss
3. Diagnostic testing
    - Laboratory evaluation
        - ESR may show slight elevation
        - Autoantibodies found in half of patients
            - 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 with 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 dz

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 with 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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