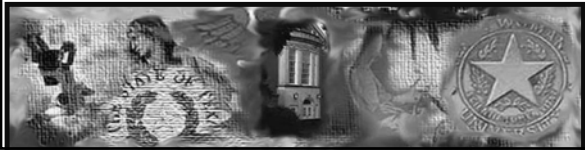


Inflammatory Bowel Disease

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NURS 5415 – Women's Health III



Objectives

- Define inflammatory bowel disease including Ulcerative colitis (UC) and Crohn's disease (CD)
- Examine pathogenesis and describe;
- Clinical presentation
- Diagnosis/ Evaluation
- Plan/Management

2

Introduction

- The term "chronic idiopathic inflammatory bowel disease" includes ulcerative colitis and Crohn's disease.
- Inflammatory bowel disease encompasses a number of chronic, relapsing inflammatory disorders involving the GI tract.
- The prevalence of these disorders is from 20 to 200 per 100,000 U.S. population.

3

Definitions

- Inflammatory Bowel Disease - includes Ulcerative colitis and Crohn's disease
 - Ulcerative colitis - a chronic recurrent disease characterized by diffuse mucosal inflammation involving only the colon.
 - Crohn's disease - a chronic recurrent disease characterized by patchy transmural inflammation involving any segment of the GI tract from the mouth to the anus.

4

An Overview of Ulcerative Colitis

- Ulcerative colitis (UC) occurs most often in people ages 15 - 40, affecting men and women equally.
- Involves the mucosal surface of the colon, resulting in diffuse friability and erosions with bleeding.
- In the majority of patients, the extent of colonic involvement does not progress over time.

5

Statistics

- Studies of IBD conducted in the US reported incidence of 7.3 per 100,000 individuals for UC and 7.0 per 100,000 individuals for CD (studies of children mirror those of adults).
- The risks for UC and CD is greater for Jewish people of middle European origin living in the US than for those living in Israel.
 - Blacks are less commonly affected than whites.

6

Diagnosis of UC

- Bloody diarrhea
- Lower abd. Cramps and fecal urgency
- Anemia, low serum albumin
- Negative stool cultures
- Sigmoidoscopy is DX key

7

Clinical Findings

- About 50% of pts., have disease confined to the rectosigmoid colon, approx. 30% extend to the spleen flexure, and < 20% extend more proximally.
- Bloody diarrhea is the hallmark due to inflammation causing frequent emptying and the formation of ulcers.

8

Clinical Findings

- Assess stool frequency, the presence and amount of rectal bleeding, cramps, abdominal pain, and tenesmus (caused from rectal inflammation).
- Determine volume status with orthostatics and HR and mucous membranes.

9

Classification of Ulcerative Colitis

- Classify patients as having mild, moderate, or severe disease.
- Mild: gradual onset of infrequent diarrhea, < 5 / day, with intermittent bleeding and mucus.
- LLQ cramps relieved with defecation is common, but no significant tenderness.

10

Classification of UC

- Moderate: more severe diarrhea, 4 - 6 / day, with frequent bleeding.
- Abd. pain may be present but not severe.
- Severe: more than 6 - 10 bloody bowel movements per day, resulting in anemia, hypovolemia, and hypoalbuminemia.
- No colonoscopies in severe disease due to risk of perforation.

11

Diagnostics for UC

- Labs: CBC w diff, SMA 7, sed. rate, stool cx. and O & P.
- Imaging: plain abdominal X-rays for patients with severe colitis to look for severe colonic dilatation.
- Refer to GI specialist for sigmoidoscopy or colonoscopy to establish presence of mucosal inflammation.

12

Diagnostics for UC

Lab findings:

- degree of abnormality of the HCT, Sed. Rate, and Serum albumin reflect disease severity.

■ Endoscopy

- Dx. established by sigmoidoscopy in acute colitis: mucosal appearance is characterized by edema, friability, mucopus, and erosions.
- Colonoscopy should not be performed on patients with severe disease R/T perforation risk.

13

Differential Diagnosis for UC

- Mild ulcerated colitis
- Crohn's disease
- Gonorrhea, chlamydial, herpes, and syphilis are considerations in sexually active patients with proctitis

14

Treatment Objectives for UC

- To terminate acute symptomatic attack
- To prevent recurrence of attacks
- Note: The treatment of acute UC is dependent upon the extent of colonic involvement and severity of illness.

15

Treatment of Colitis

- Mild to moderate disease should remain on a regular diet, caffeine and gas-producing vegetables are restricted. Fiber supplements decrease diarrhea and rectal symptoms.
- Antidiarrheal agents should not be given in the acute phase but are safe in pts. with mild chronic symptoms.

16

Treatment of Colitis

- Disease confined to the sigmoid topical mesalamine (Asacol) is the drug of choice, suppository and enema routes. If pt. fails to respond, systemic steroids or immunosuppressives are used.
- Disease extending beyond the sigmoid colon is best treated with oral agents.

17

Treatment of Colitis

- Antiinflammatories, sulfasalazine and mesalamine, result in symptomatic improvement in 50 - 75% of pts.
- Asacol 800 mg po TID. Sulfasalazine 500mg po BID is the initial dose, increasing to 2 Gms BID.
- Most patients improve within 3 wks., although some require 2 -3 months.

18

Treatment of Colitis

- If no improvement in 2 - 3 wks, Hydrocortisone foam or enemas should be tried first.
- If no improvement after 2 - 3 wks., Prednisone or Methylprednisolone are commonly used, 20mg - 30mg BID, begin to taper after 2 wks.

19

Treatment of Colitis

- Severe Colitis: Hospitalization is generally required. The pt. is made NPO, and given IVF, and occasionally TPN.
- Corticosteroid therapy is initiated.
- If no improvement, Cyclosporine IV is started.
- If no improvement, surgery is recommended (25% of pts.).

20

Treatment of UC

- Regular diet - limiting caffeine and gas producing vegetables
- Fiber supplements
- Antidiarrheal agents only after the acute phase.

21

Complications of UC

- Arthritis, uveitis, pyoderma, gangrenosum, malnutrition, growth failure and delayed puberty, liver disease, and carcinoma of the colon

22

An Overview of Crohn's Disease

- Crohn's disease is a transmural process that can result in mucosal inflammation and ulceration, stricturing, fistula development, and abscess formation.
- Occurs in the ileum but can occur in any part in the GI tract.
- Assess for fevers, # of stools, sense of well-being, abdominal pain, and prior surgeries (50% have at least one surgery).

23

Diagnosis of CD

- Insidious onset
- Intermittent bouts of low grade fever, diarrhea, and RLQ pain
- RLQ mass and tenderness
- Perianal disease with abscess, fistulas
- Radiographic evidence of ulceration, stricturing, or fistulas of the small intestine or colon

24

Clinical Findings with Crohn's

- Chronic inflammatory disease: most common, seen in pts. with ileitis or ileocolitis.
- Pts. report fevers, malaise, wt. loss and fatigue. There may be diarrhea, nonbloody, and often intermittent cramping, steady RLQ pain, and periumbilical pain.

25

Clinical Findings of CD

- Signs and symptoms:
 - R/T variable location of involvement and severity of inflammation, CD may present with a variety of S/S to include fever, sense of well-being, presence of abdominal pain, number of liquids stools per day, prior surgical resections

26

Clinical Findings (cont.)

- Intestinal obstruction: can result due to the inflammation, spasm, or fibrotic stenosis. Pts. report feeling postprandial bloating, cramping and borborygmi.
- Fistula formation: sinus tracts that penetrate through the bowel to a number of locations i.e. bladder, vagina, small intestine to colon.

27

Clinical Findings (cont.)

- Perianal disease: 1/3 of pts. develop anal fissures, perianal abscesses, and fistulas
- Malabsorption: may arise from bacterial overgrowth in pts. with enterocolonic fistulas, strictures, and stasis, extensive jejunal inflammation, and prior surgical resection.

28

Diagnostics for Crohn's Disease

- Labs: CBC with diff, SMA 7, serum albumin, sed rate, stool for culture, O&P, and C-diff. toxin.
- An upper GI with small bowel follow-through is obtained in all pts to assess for strictures, fistulas, and ulcerations. To evaluate the colon--a colonoscopy or barium enema is obtained.

29

Diagnostic Studies (continued)

Endoscopy and x-rays are used to diagnose the particular disorder and to determine the extent of the disease.

In 10% of the cases, it may be difficult to distinguish UC from Crohn's disease

30

Differential Diagnosis of CD

- Irritable bowel syndrome
- Appendicitis
- Intestinal lymphoma
- Undiagnosed AIDS
- Diverticulitis with abscess
- Rheumatoid arthritis
- Systemic lupus erythematosus (SLE)

31

Differential Diagnosis of CD (cont.)

- Celiac disease
- Peptic Ulcer
- Intestinal obstruction

32

Treatment of Crohn's

- No specific therapy exists, treatment is directed toward the controlling the disease process.
- Sulfasalazine 1.5 - 2 Gm BID (or TID) is effective in reducing symptoms, but offers little relief for pts with small intestine involvement.
- Corticosteroids suppress the acute symptoms in most pts with large and small intestine involvement.

33

Treatment of Crohn's

- Prednisone 40 - 60 mg / day is given with an active flare up, taper at 2 - 3 wks.
- With persistent symptoms i.e. fever, abdominal pain, vomiting, need and abdominal CT to rule out possible abscess or obstruction occurrence.
- Immunomodulatory drugs - Azathioprine and mercaptopurine are effective in long-term treatment.

34

Treatment of CD

- Nutrition: Well-balanced diet, enteral therapy, TPN, antibiotics as needed.

35

Treatment of CD (cont.)

- Symptomatic medications: cholestyramine 2-4 gm or colestipol 5 gm 2-3 times daily ac meals, loperamide 2-4 mg., diphenoxylate with atropine 1 tab, or tincture of opium may be given prn up to QID.

36

Complications of CD

- Intestinal obstruction, fistula, abscess, perforation, hemorrhage, malnutrition, perianal disease, pyoderma gangrenosum, arthritis, amyloidosis, growth retardation, and colon cancer.

37

IBD in Children

- Symptoms are similar to adults, i.e. diarrhea, abdominal cramping, and tenesmus.
- Growth failure may be seen in 6% to 12% of children before corticosteroid therapy.
- The onset of symptoms may be abrupt or insidious, occurring over weeks or months.

38

IBD in Children

- Children may have or eventually develop extra intestinal manifestations of their disease. One is seen in ~ 25% to 35% of pts. These manifestations include arthritic inflammation, anemia, digital clubbing, and growth delay.
- As with adults, the treatment depends on the degree of debilitation, location, and severity of disease. The same meds are used in children as in adults.

39

IBD in Children - Key Points

- Symptoms noted depend on the location of the disease and resemble those of adults.
- Common presenting symptoms for both CD and UC in children are abdominal pain, diarrhea, fever, blood in the stool, and weight loss (Table 26-1 in Jackson pg. 584).
- Growth failure may be seen in 6% - 12% of these children before corticosteroid therapy.

40

IBD in Children - Treatment

- The specific treatment plan depends on the location and severity of the disease, the effect of the disease on growth and development, and the degree of debilitation experienced by the child.

41

IBD in Children - Treatment (cont.)

- Children with severe disease:
 - require aggressive medical intervention
 - generally hospitalization
 - restricted diets
 - IV corticosteroid therapy
 - possibly TPN
 - If not responding to medical management, surgery may be required.

42

Inflammatory Bowel Disease and Cancer Risks

- There is a markedly increased risk for developing colon cancer in pts with UC proximal the sigmoid and for pts with colonic Crohn's disease.
- Colonoscopies are recommended ever 1 -2 years in pts with extensive colitis, beginning 8 -10 yrs after diagnosis. Folic acid 1mg / day is associated with a decreased risk of CA development.

43

Summary

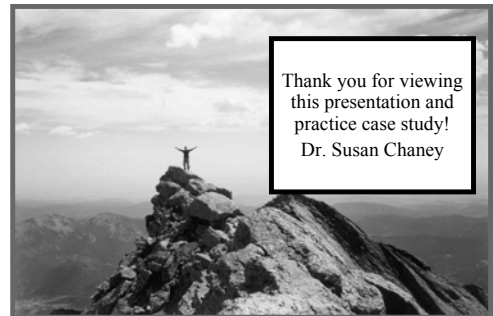
- Therapy for IBD is individualized to reach realistic goals.
- Social support for pts with these diseases is important because this is a life-long illness it can have a profound emotional and social impact on an individual's life.
- Pts should be given information and be encouraged to be involved in the Crohn's and Colitis Foundation of America. <http://www.cffa.org>.

44

Conclusion

- Both UC and CD are chronic diseases
- With proper medical and/or surgical treatment, the majority of patients are able to cope with these chronic diseases and their complications and can lead productive lives.

45



46