

4th class- pathology..... lecture 11

Inflammatory bowel disease (IBD)

IBD: Immune-mediated chronic intestinal inflammatory condition.

_ Inflammatory bowel disease (IBD) is an immune-mediated chronic intestinal inflammatory condition. It results from inappropriate mucosal immune activation.

_ Major types of IBD: 1) **Ulcerative colitis** (UC) and 2) **Crohn disease** (CD).

Epidemiology

_ Age of onset: Both UC and CD occurs between 15 and 30 years of age. A second peak is between the ages of 60 and 80 years.

_ Prevalence of IBD is higher in urban than rural areas, and higher prevalence in high socioeconomic classes than lower socioeconomic classes.

_ Cigarette smoking.

_ Oral contraceptives use: Increased risk of CD.

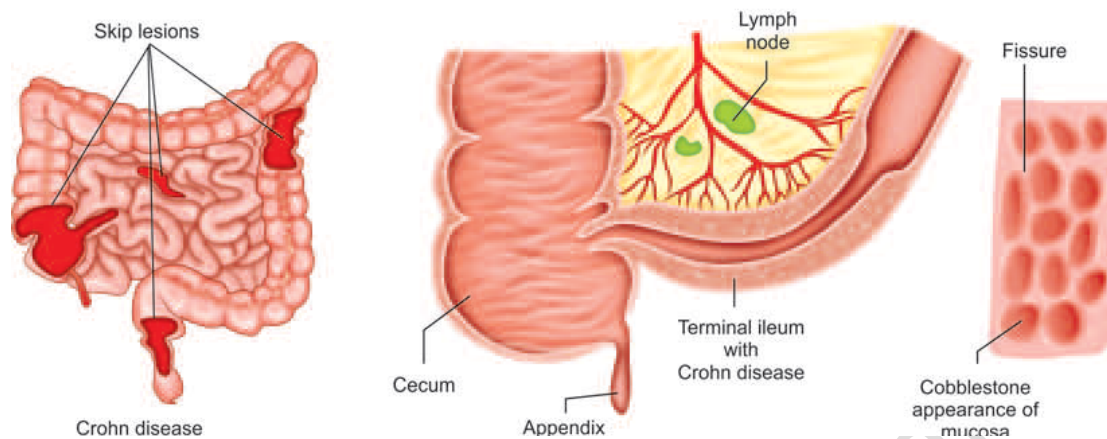
_ Appendectomy: It is protective against UC but is associated with a higher risk of CD.

Etiology and Pathogenesis

IBD is an idiopathic disorder. The exact trigger for inflammatory bowel disease is not known. Present evidences suggest that IBD represents the outcome of three main interactive factors: Genetic, environmental and host factors.

Crohn disease

Crohn disease is a chronic multifocal relapsing and remitting, progressive inflammatory bowel disease of unknown cause that can involve any portion of the gastrointestinal tract.



Figs 18.25A and B: (A) Distribution of lesions in Crohn disease; (B) Gross features of Crohn disease

Complications

1. Iron-deficiency anemia: It may develop in patients with colonic disease.
2. Malabsorption: Extensive involvement of the small intestine may result in loss of protein, hypoalbuminemia and malabsorption.
3. Stricture formation: It may occur in the terminal ileum.
4. Fistula formation: It may form between loops of intestine and surrounding structures such as urinary bladder, vagina and abdominal or perianal skin. Perforations and peritoneal abscesses are common.
5. Acute complications: Perforation and hemorrhage.
6. Development of carcinoma: It is rare and risk of carcinoma colon is increased in patients with long-standing colonic disease.
7. Systemic amyloidosis: It is rare.

Ulcerative colitis

Ulcerative colitis (UC) is a severe, chronic crypt destructive, ulcerating inflammatory bowel disease of unknown cause. It is limited to the colon and rectum and inflammation involves only the mucosa and submucosa of the intestinal wall. It is clinically associated with exacerbations and remissions of bloody diarrhea.

Complications

Complications of ulcerative colitis:

1. Toxic megacolon
2. Development of colorectal carcinoma
3. Intestinal hemorrhage
4. Electrolyte imbalances.

COLORECTAL CANCER:

ADENOCARCINOMA

Adenocarcinoma of the colon (colorectal carcinoma) is the most common malignant tumor of the GI tract. The rate of colorectal cancer has increased significantly, probably as a result of changes in lifestyle and diet.