

Crohn's Disease

Alaa Hamza Hermis

Crohn's Disease



Definition

- ▶ Crohn's disease is characterized by periods of remission and exacerbation. It is a subacute and chronic inflammation of the GI tract wall that extends **through all layers**.

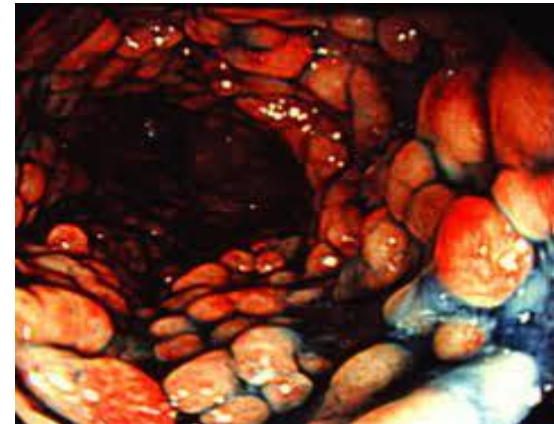
Introduction

- ▶ Although its characteristic histopathologic changes can occur anywhere in the GI tract, it most commonly occurs in the **distal ileum and the ascending colon**.

Approximately 35% of patients have only ileal involvement (ileitis), 45% of patients have diseased ileum and colon (ileocolitis), and 20% of patients have only colon involvement.

Pathophysiology

Crohn's disease begins with crypt inflammation and abscesses, which develop into small, focal ulcers. These initial lesions then deepen into longitudinal and transverse ulcers, separated by edematous patches, creating a characteristic **cobblestone** appearance to the affected bowel. **Fistulas**, **fissures**, and **abscesses** form as the inflammation extends into the peritoneum.



Clinical Manifestations

The onset of symptoms is usually insidious in Crohn's disease, with prominent

1. Right lower quadrant abdominal pain and diarrhea unrelieved by defecation. (crampy occur after meals).
2. Weight loss.
3. Malnutrition.
4. Secondary anemia.

Clinical Manifestations cont.

5. Intra-abdominal and anal abscesses.
6. Fever and leukocytosis occur.
7. Chronic symptoms include diarrhea, abdominal pain, steatorrhea, anorexia, weight loss, and nutritional deficiencies.

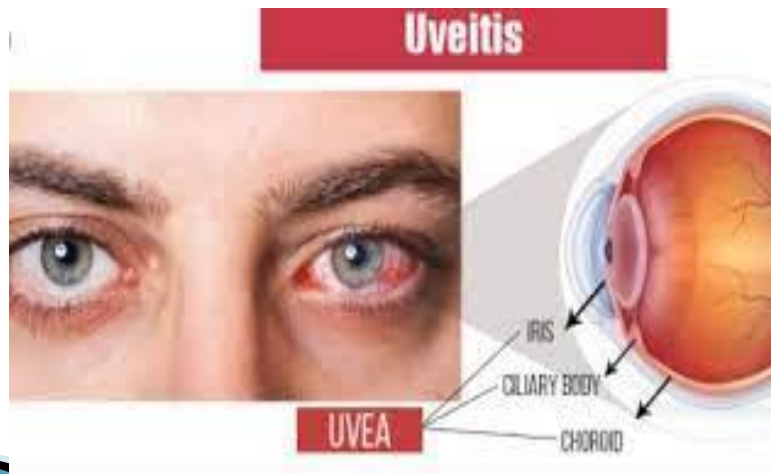
8. Other manifestations



Joint Disorders



Skin Lesions



Ocular Disorders



Oral Ulcers

Assessment and Diagnostic Findings

1. A stool examination is performed (steatorrhea).
2. Barium study.
3. CT scan and MRI.
4. CBC and ESR.
5. Ibumin and protein levels may be decreased, indicating malnutrition.

Therapeutic Management

- ▶ **1. Nutritional management**
- ▶ Therapy Oral fluids and a low-residue, **high-protein**, high-**calorie** diet with **supplemental vitamin** therapy and **iron replacement** are prescribed to meet nutritional needs, reduce inflammation, and control pain and diarrhea.
- ▶ Parenteral nutrition may be indicated

2. Pharmacologic Therapy

1. Sedatives and antidiarrheal.
2. Corticosteroids.
3. 5-Aminosalicylates such as sulfasalazine (Azulfidine).
(Prostaglandins to control of pain and inflammation).
4. Antibiotics (e.g., metronidazole)
5. Immunomodulators (eg, azathioprine and mercaptopurine) have been used to alter the immune response.

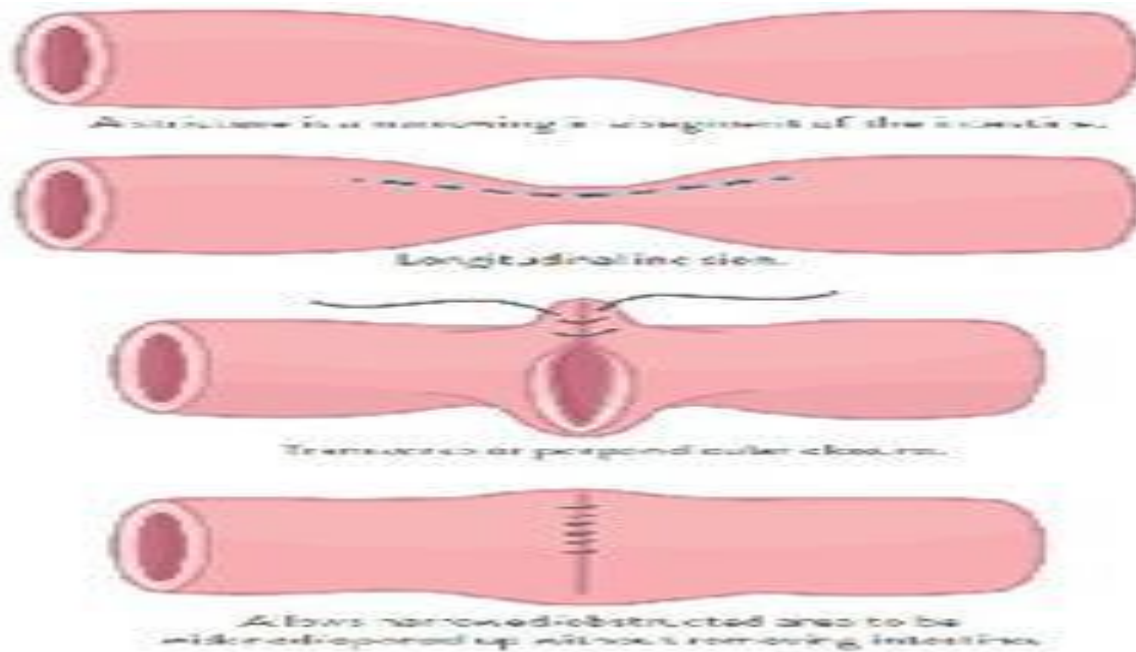
3. Surgical Management

- Between 60% and 70% of patients with Crohn's disease require surgery
- Common indications for surgery include:
 - ❖ Recurrent partial intestinal obstructions.
 - ❖ Complete intestinal obstructions.
 - ❖ Intractable fistulas; or intractable abscesses.

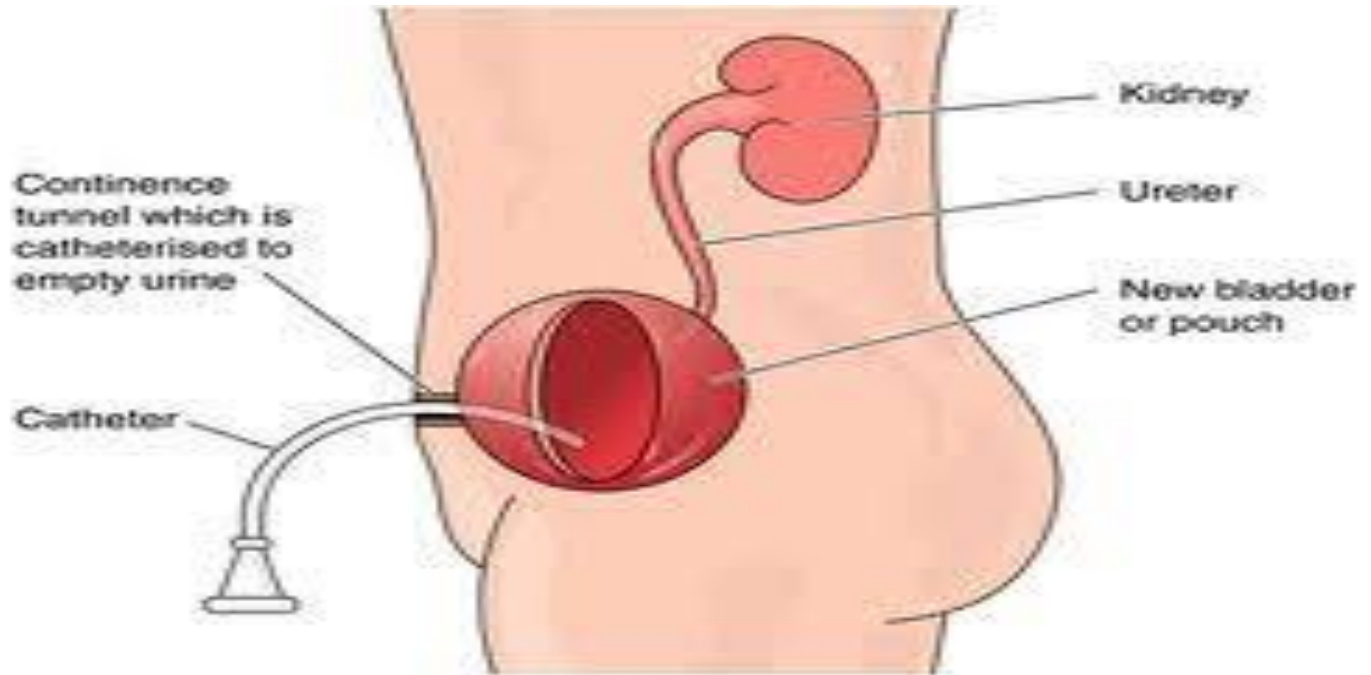
Surgical cure is not possible however; nearly 50% of patients with Crohn's disease who require surgical intervention will eventually require additional future surgery

Surgical Management cont.

1. laparoscope-guided strictureplasty.



2. Total Colectomy With Ileostomy.
3. Continent Ileostomy (ie;Kock pouch) :type of continent ileal reservoir created surgically by making an internal pouch with a portion of the ileum and placing a nipple valve flush with the stoma.



4. Intestinal Transplant



Complications

1. Intestinal obstruction or stricture formation.
2. Perianal disease.
3. Fluid and electrolyte imbalances.
4. Malnutrition.
5. Fistula and abscess formation.
6. Colon cancer.

Nursing Diagnoses

Based on the assessment data, the nursing diagnoses may include the following:

- Diarrhea related to the inflammatory process
- Acute pain related to increased peristalsis and GI inflammation .
- Deficient fluid volume related to anorexia, nausea, and diarrhea.

Nursing Diagnoses

- Imbalanced nutrition, less than body requirements, related to dietary restrictions, nausea, and malabsorption
- Activity intolerance related to generalized weakness.

Nursing Interventions



Maintaining normal elimination patterns

- ▶ The nurse assists the patient in determining if there is a relationship between diarrhea and certain foods, activities, or emotional stressors.
- ▶ Identifying precipitating factors, the frequency of bowel movements, and the character, consistency, and amount of stool passed .
- ▶ The nurse provides ready access to a bathroom or bedpan .
- ▶ keeps the environment clean and odor free.
- ▶ Administer antidiarrheal medications as prescribed.

Relieving pain

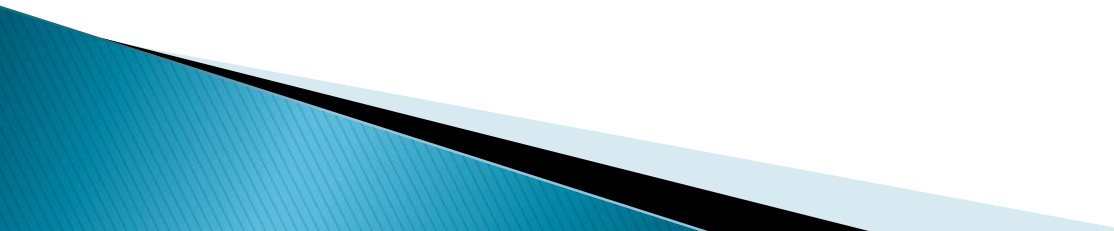
1. Assess the character of the pain .
2. The nurse administers analgesic agents as prescribed.
3. Position changes, local application of heat (as prescribed).
4. Diversional activities and prevention of fatigue .

Maintaining fluid intake

- ▶ The nurse keeps an accurate record of I&O.
- ▶ The nurse monitors daily weights.
- ▶ Assesses the patient for signs of fluid volume deficit.
- ▶ Encourage oral intake of fluids .
- ▶ Monitor the flow rate of any iv fluids.

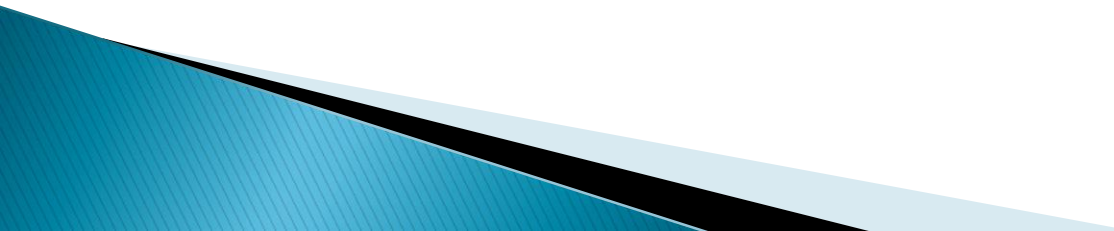
Maintaining optimal nutrition

1. Parenteral nutrition is indicated in patients who have severe malnutrition and intolerance to enteral nutrition.
2. Daily weight.
3. Blood glucose levels are monitored every 6 hours.
4. Elemental feedings are high in protein and low in fat and residue.

5. If oral foods are tolerated, small, frequent, low-residue feedings are given to avoid over distending the stomach and stimulating peristalsis.
 6. The patient must restrict activity to conserve energy, reduce peristalsis, and reduce caloric requirements.
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Promoting rest

1. The nurse recommends intermittent rest periods during the day and schedules or restricts activities to conserve energy and reduce the metabolic rate.
2. Encourage activity within the limits of the patient's capacity. The nurse suggests naps and periods of bed rest for a patient who is febrile, has frequent diarrheal stools, or is bleeding.

3. The patient should perform active exercises to maintain muscle tone and prevent venous thromboembolic complications.
 4. If the patient cannot perform these active exercises, the nurse performs passive exercises and joint range of motion.
 5. Activity restrictions are modified as needed on a day-to-day basis.
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FOR YOUR
ATTENTION

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