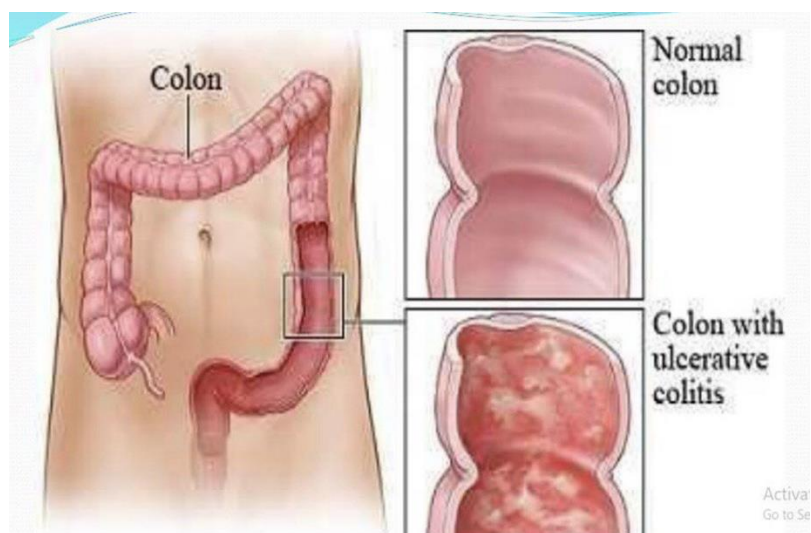


Ulcerative colitis

Ulcerative colitis (UC) is a type of inflammatory bowel disease (IBD). IBD comprises a group of diseases that affect the gastrointestinal (GI) tract. UC occurs when the lining of your large intestine, rectum, or both become inflamed. This inflammation produces tiny sores called ulcers on the lining of your colon. Inflammation usually begins in the rectum and spreads upward. It can involve your entire colon. The inflammation causes your bowel to move its contents rapidly and empty frequently. As cells on the surface of the lining of your bowel die, ulcers form. The ulcers may cause bleeding and discharge of mucus and pus.



Causes

The exact cause of ulcerative colitis remains unknown.

Previously, diet and stress were suspected. One possible cause is an immune system malfunction. When your immune system tries to fight off an invading virus or bacterium, an irregular immune response causes the immune system to attack the cells in the digestive tract, too. Heredity also seems to play a role in that ulcerative colitis is more common in people who have family members with the disease. However, most people with ulcerative colitis don't have this family history.

Pathophysiology

Ulcerative colitis

Causative agents
“ poor nutrition , genetic factors , infection , stress “

Inflammation process

**Affects the superficial
mucosa of the colon**



**The diseases process
Begin in the rectum and
spread to involve entire
colon**

**Bowel narrow and
thickens because of
muscular hypertrophy**

Rectal bleeding

- Diarrhea
- Abdominal pain
- Fever
- Weight loss

Common symptoms of UC include:

- ✓ Abdominal pain
- ✓ Increased abdominal sounds
- ✓ Bloody stools
- ✓ Diarrhea
- ✓ Fever
- ✓ Rectal pain
- ✓ Weight loss
- ✓ Malnutrition
- ✓ Uc may cause additional symptoms, such as:

- Joint pain
- Joint swelling
- Nausea and decreased appetite
- Skin problems
- Mouth sores
- Eye inflammation

Risk factors

Ulcerative colitis affects about the same number of women and men. Risk factors may include:

- **Age.** Ulcerative colitis usually begins before the age of 30, but it can occur at any age. Some people may not develop the disease until after age 60.
- **Race or ethnicity.** Although white people have the highest risk of the disease, it can occur in any race. If you're of Ashkenazi Jewish descent, your risk is even higher.
- **Family history.** You're at higher risk if you have a close relative, such as a parent, sibling or child, with the disease.

Diagnostic Tests

These diagnostic tests may be carried out during the perioperative phase:

- Blood analyses such as [complete blood count](#), sedimentation rate, c-reactive protein, serum protein electrophoresis with immunofixation, calcium, alkaline phosphatase, and chemistry profile
- X-ray studies
- MRI and CT scans (with or without myelography)
- Electrodiagnostic studies
- Bone scan
- Endoscopies
- Tissue biopsies
- [Stool](#) studies
- [Urine](#) studies

Types of ulcerative colitis

UC can be categorized according to the parts of the GI tract that it affects.

- **Ulcerative proctitis**, only the rectum is inflamed. It's considered a mild form of UC.

Left-sided colitis. Left-sided colitis causes inflammation in the area between the splenic flexure (near the upper part of the colon, where it bends) and the last section of the colon. The last section of the colon, known as the distal colon, includes the descending colon and sigmoid colon. Left-sided colitis is also known as distal ulcerative colitis.

Proctosigmoiditis. Proctosigmoiditis is a form of left-sided colitis. It causes inflammation in the rectum and sigmoid colon.

Extensive colitis. also known as pancolitis, causes inflammation throughout the entire colon. It's considered a severe form of UC.

Complications of ulcerative colitis

Possible complications of ulcerative colitis include:

- Severe bleeding
- Severe dehydration
- A rapidly swelling colon, also called a toxic megacolon

- A hole in the colon, also called a perforated colon
- Increased risk of blood clots in veins and arteries
- Inflammation of the skin, joints and eyes
- An increased risk of colon cancer
- Bone loss, also called osteoporosis

Management of ulcerative colitis

Medical treatment for ulcerative colitis is aimed at reducing inflammation. Suppressing inappropriate immune responses. Providing rest for a diseased bowel so that healing may take place. improving quality of life And preventing or minimizing complications. Management depends on the disease location, severity, and complications.

Nursing care plan

Nursing diagnosis :

Diarrhea related to the inflammatory process

Planning : Maintaining Normal Elimination Patterns

Interventions :

- The nurse provides ready access to a bathroom, or bedpan and keeps the environment clean and odor-free.
- It is important to administer antidiarrheal medications as prescribed, to record the frequency and consistency of stools after therapy is initiated, and to encourage bed rest to decrease peristalsis.

Nursing diagnosis :

- Acute pain related to increased peristalsis and GI inflammation

Planning : Relieving Pain

Interventions :

- The nurse administers anticholinergic medications 30 minutes before a meal as prescribed to decrease intestinal motility and administers analgesics as prescribed for pain. Position changes, local application of heat (as prescribed), and prevention of fatigue also are helpful for reducing pain.

Nursing diagnosis :

- Deficient fluid volume related to anorexia, nausea, and diarrhea

Planning : Maintaining Fluid Intake

Interventions :

- To detect fluid volume deficit, the nurse keeps an accurate record of oral and IV fluids and maintains a record of output (ie, urine, liquid stool, and vomitus).
- The nurse monitors daily weights for fluid gains or losses and assesses the patient for signs of fluid volume deficit (ie, dry skin and mucous membranes, decreased skin turgor, and hypotension).
- It is important to encourage oral intake of fluids and to monitor the flow rate of any IV fluids.
- The nurse initiates measures to decrease diarrhea (eg, dietary restrictions, antidiarrheal agents).

Nursing diagnosis :

Imbalanced nutrition, less than body requirements, related to dietary restrictions, nausea, and malabsorption

Planning : Maintaining Optimal Nutrition

Interventions :

- The nurse maintains an accurate record of fluid intake and output as well as the daily weight. blood glucose levels are monitored every 6 hours.
- The nurse notes intolerance if the patient exhibits nausea, vomiting, diarrhea, or abdominal distention. If oral foods are tolerated, small, frequent, low-residue feedings are given to avoid over distending the stomach and stimulating peristalsis.
- It is important that the patient restrict activity to conserve energy, reduce peristalsis, and reduce caloric requirements.

Nursing diagnosis :

- Risk for impaired skin integrity related to malnutrition and diarrhea

Planning : Preventing Skin Breakdown**Interventions :**

- The nurse examines the patient's skin frequently, especially the perianal skin. Perianal care, including the use of a skin barrier (eg, ointment [Vaseline]), is important after each bowel movement.
- The nurse gives immediate attention to reddened or irritated areas over bony prominences and uses pressure-relieving devices to prevent skin breakdown.

Irritable bowel syndrome

Definition

- Irritable bowel syndrome (IBS) is a common functional disorder of GI motility not associated with anatomic changes that affects the stomach and intestines, also called the gastrointestinal tract.,. It is also known as spastic colon or irritable colon.

Causes

The exact cause of IBS isn't known. Factors that appear to play a role include:

- **Muscle contractions in the intestine.** The walls of the intestines are lined with layers of muscle that contract as they move food through your digestive tract. Contractions that are stronger and last longer than usual can cause gas, bloating and diarrhea. Weak contractions can slow food passage and lead to hard, dry stools.
- **Nervous system.** Issues with the nerves in your digestive system may cause discomfort when your abdomen stretches from gas or stool. Poorly coordinated signals between the brain and the intestines can cause your body to overreact to changes that typically occur in the digestive process. This can result in pain, diarrhea or constipation.
- **Severe infection.** IBS can develop after a severe bout of diarrhea caused by bacteria or a virus. This is called gastroenteritis. IBS might also be associated with a surplus of bacteria in the intestines (bacterial overgrowth).
- **Early life stress.** People exposed to stressful events, especially in childhood, tend to have more symptoms of IBS.
- **Changes in gut microbes.** Examples include changes in bacteria, fungi and viruses, which typically reside in the intestines and play a key role in health. Research indicates that the microbes in people with IBS might differ from those in people who don't have IBS.

Risk Factors

- Psychological stress
- Prediverticular disease with changes in the bowel wall
- Low-residue diet or a diet high in rich and stimulating or irritating foods
- Alcohol consumption and smoking

Pathophysiology

- IBS develops in the absence of organic disease or anatomic abnormality. Emotional stress may disturb autonomic nervous system function, leading to disrupted intestinal motility and transit time.

Clinical Manifestations

The typical triad of findings in IBS include:

- Abdominal pain with tenderness on palpation (abdominal pain may be localized in the left lower quadrant, be constant or intermittent and be relieved by passing flatulence or stool)
- Altered bowel habits, such as diarrhea, or constipation. (diarrhea often alternates with constipation. Stools may contain increased mucus but seldom contain blood)
- Absence of detectable disease. (Symptoms often mimic those of other conditions hindering the differential diagnosis). The diagnosis must first exclude any organic GI disease or abnormality).

Laboratory and diagnostic study findings:

- Barium enema and colonoscopy reveal spasms, distention, or mucus accumulation in the intestines.
- Complete blood count shows normal findings
- Stool analysis shows normal findings.

Nursing Management

Teach the client measures to reduce symptoms by:

- Eating a well balanced, high-fiber diet; avoiding gas-forming foods; and avoiding fluid intake with meals because it causes abdominal distention.
- Adhering to a schedule of regular work and rest periods.
- Participating in regular exercise, which reduces anxiety and increases intestinal motility.
- Avoiding or minimizing stress-producing situations.
- Drinking six to eight glasses of water daily (not at meals) to prevent constipation
- Adhering to a regular eating schedule and chewing food slowly and thoroughly.

Promote client and family coping.

- Provide the client with reassurance and emotional support to help decrease anxiety and increase his sense of control over the situation and its management.

Administer medications, which may include anticholinergics, antispasmodics, antidiarrheals, and bulk laxatives.