Inflammatory Processes

Ulcerative colitis is a recurrent inflammatory process causing ulcer formation in the lower portions of the large intestine and rectum. This condition is common in adolescents and young adults. The distribution of the inflammatory process is diffuse. The ulcerative areas abscess and later become necrotic. Diarrhea, abdominal pain, and cramping with weight loss are common symptoms of the disease process.

Esophagitis is an inflammatory process of the esophagus. It is caused by a variety of irritants. The more common causes include smoking, alcohol abuse, reflux of gastric contents, and ingestion of extremely hot or cold foods and liquids.

Peritonitis is a local or generalized inflammatory process of the peritoneal membrane of the abdomen. The precipitant can be an infectious process (pelvic inflammatory disease), perforation of an organ (ruptured duodenal ulcer), internal bleeding (ruptured ectopic pregnancy), or trauma (stab wound to abdomen).

Hepatitis is an inflammatory process of the liver. Its causes include viruses, bacteria, chemicals, and drugs. Types of hepatitis include the following.

Hepatitis A virus (HAV) infectious hepatitis is transmitted via enteric routes (feces or oral routes).

Hepatitis B virus (HBV) is transmitted parenterally, sexually, or perinatally.

Hepatitis C virus (HCV) is transmitted via blood and blood products, parenterally, and through unknown factors.

Hepatitis D virus (HDV) is the same as HBV and requires HBV to replicate.

Hepatitis E virus (HEV) is a non-A, non-B type transmitted enterically. HEV is most common in those who travel to India, Africa, Asia, and Central America.

Crohn’s disease is a chronic inflammatory process of the ileum. It is sometimes called regional ileitis, which is a misnomer because it can involve any part of the lower intestinal tract. Crohn’s disease is characterized by “skipped” sections of involvement. It is most common in young adults and usually has an insidious onset. The inflammation involves all layers of the intestinal mucosa. Transverse fissures develop in the bowel, producing a characteristic cobblestone appearance.

Health Promotion

HEALTHY PEOPLE 2010

FOCUS AREA

Colorectal Cancer

Foodborne Illness

PREVALENCE

• Colorectal cancer is the second leading cause of cancer deaths in the United States.

• Very young, elderly, and immunocompromised individuals experience serious foodborne illnesses.

• Risks of foodborne illnesses increase as a result of emerging pathogenic organisms, improper food storage or preparation, increasing global supply of foods, inadequate training of food handlers, and an aging population.

• Food allergies are present in almost 4% of children under age 6 and 1 to 2% of the adult population.

OBJECTIVES

• Reduce death rate from colorectal cancer.

• Reduce infections by foodborne pathogens.

• Reduce anaphylaxis deaths from food allergies.

• Education about risks and screening.

• Education about food handling in retail areas and in the home.

• Education about food labeling and preparation.

(continued)
HEALTHY PEOPLE 2010—continued

FOCUS AREA  | PREVALENCE                                                                 | OBJECTIVES                        | ACTIONS                                                                 |
---          | ---                                                                 | ---                                | ---                                                                     |
Hepatitis   | • Hepatitis C virus (HCV) is the most common bloodborne viral infection in the United States. |
            | • Hepatitis B virus (HBV) occurs in more than 15,000 children born of mothers infected with HPV. |
            | • Hepatitis A virus (HAV) occurs most frequently in children, and children are a source for new community infections. |
            | • Reduce hepatitis C, B, and A.                                         | • Screening.                       | • Education about hepatitis.                                            |
            | • Screening.                                                            | • Immunization programs.           |

CLIENT EDUCATION

The following are physiological, behavioral, and cultural factors that affect the health of the gastrointestinal system and abdominal structures across the life span. Several factors reflect trends cited in Healthy People 2010. The nurse provides advice and education to promote and maintain health and reduce risks associated with the aforementioned factors.

LIFE SPAN CONSIDERATIONS

RISK FACTORS

• Congenital defects such as cleft lip, cleft palate, esophageal atresia, pyloric stenosis, and hernias affect the nutritional status as well as the growth and development of infants and children.

• Pregnant females experience hormonal shifts that result in nausea, vomiting, and constipation.

• A decrease in digestive enzymes and decreased peristalsis occur in older adults.

• Obesity has become increasingly prevalent across the age span in the United States.

• Dental diseases occur at all ages and impact nutrition by affecting the desire for food and the ability to chew foods.

• Foodborne illness occurs in all age groups; however, children, older adults, and those with immunosuppression are at greatest risk.

• Hepatitis infections can be acute or chronic and occur in all ages. Hepatitis A occurs most frequently in children and young adults. Hepatitis can be an acute self-limiting illness or a chronic debilitating disease. It can result in liver necrosis and death. Individuals who travel to India, Asia, Africa, and Central America are at risk for hepatitis E.

• Educate parents of children with congenital defects about alterations in foods and feeding patterns.

• Tell pregnant clients that dietary changes including small, frequent meals of dry foods are helpful in relieving the nausea and vomiting in early pregnancy.

• Inform clients that increased fluid intake, fruits, and high-fiber foods increase regularity in bowel elimination in pregnant females and in older adults.

• Tell clients that regular exercise promotes and maintains the efficiency of gastrointestinal function.

• Provide information about healthy eating from infancy to old age to prevent obesity and contribute to improved gastrointestinal function.

• Advise clients about regular dental hygiene and care to reduce risks for malnutrition.

• Provide information about safe food preparation, handling, and storage as it is important in reducing the incidence of foodborne illnesses and hepatitis.

• Tell clients that immunization for hepatitis is important across the age span. Recommended schedules should be followed.
CULTURAL CONSIDERATIONS

RISK FACTOR
• The types of foods one eats and the ways in which foods are prepared are influenced by culture. Frequent ingestion of fried foods can result in obesity and health problems associated with high cholesterol.

CLIENT EDUCATION
• Discuss alternative methods of food preparation and seasoning to decrease the incidence of obesity and gastrointestinal disorders that occur with greater frequency in cultural groups who prepare spicy and fried foods.

ENVIRONMENTAL CONSIDERATIONS

RISK FACTORS
• Medications can impact the function and integrity of the gastrointestinal system. For example, aspirin and NSAIDs can irritate the mucosa of the gastrointestinal tract. Pain medications often slow the peristaltic process.
• Stress is associated with increased frequency, duration, and acuity of gastrointestinal and abdominal problems including ulcerative diseases and eating disorders.

CLIENT EDUCATION
• Provide instruction about prescribed and OTC medications to reduce the risks of side effects that impact gastrointestinal health and other physiological functions or systems.
• Provide information about stress reduction techniques, support groups, and resources in the community to assist with crisis management and ongoing stressful situations.

BEHAVIORAL CONSIDERATIONS

RISK FACTOR
• Alcohol abuse is associated with gastritis and liver disease. The number of adolescents who abuse alcohol is on the rise. Alcohol use is greater in Caucasians and Hispanics than in African Americans.

CLIENT EDUCATION
• Advise adolescents, parents, and adults about alcohol abuse in relation to gastrointestinal and liver diseases. Teach clients how to recognize behaviors associated with alcohol abuse, and about prevention programs and addiction services to reduce the incidence of physical and emotional problems associated with alcohol abuse.

CASE STUDY

Luiz Hernandez, a 28-year-old Hispanic male, is seeking care for abdominal pain and weight loss in the neighborhood clinic. He has been seen here for employment physicals, which revealed no acute or chronic health problems.

During the interview the nurse learns that the client has had abdominal pain, on and off, for a couple of months and that the pain is getting worse. The pain is in the middle of his stomach and is like an ache. Mr. Hernandez says he has also had no interest in food, feels gassy, and has lost about 10 lb.

When asked about factors that precipitate or affect the pain, the client reveals that the pain occurs most frequently late in the morning and afternoon and that he wakes up at night with the pain. When asked if he has tried any remedy for the pain, Mr. Hernandez states that he uses an antacid once in a while and it helps, and that he takes mint because that is what his mother gave to the family members when they had stomach troubles.

In response to questions about weight loss, Mr. Hernandez says that he thinks he has been losing weight because he just hasn’t been feeling hungry and many of the foods he is used to eating do not appeal to him. He also states that he is starting to get nervous about the pain, and when he is nervous he never feels like eating. The nurse asks if he is nervous about this clinic visit. The client replies that he was really nervous when he arrived but is feeling a little better now that he is talking about what is going on. He further states, “I am still scared about what might be causing this.”

The nurse continues the interview with questions about the client’s past and family history. No acute or chronic problems are revealed. The nurse asks the client about use of medications and his habits. Mr. Hernandez states that he uses Tylenol occasionally for a headache. He does not smoke and uses alcohol socially, mostly on weekends.

The physical examination reveals vital signs of B/P 132/84—P 88—RR 22. The skin is cool, dry, and pale. The abdomen is soft