

UNIT 10 - DIGESTIVE SYSTEM

Diseases and Disorders of the Digestive System

A. **Appendicitis**

Appendicitis, the inflammation of the appendix, is the most common surgical disease. It results from the obstruction of the opening to the appendix by a mass, stricture or infection. This sets off an inflammatory process that can lead to infection and necrosis. Symptoms of appendicitis include generalized abdominal pain, rebound tenderness, with the pain localizing in the lower right abdomen, nausea, vomiting, possibly fever, and an elevated white blood cell count. Treatment involves the removal of the structure and possibly antibiotic therapy.

B. **Cirrhosis**

Cirrhosis of the liver is a chronic liver disease characterized by the destruction of the liver cells followed by scarring. Mortality is high with most patients dying within five years of the onset. One of the major causes of cirrhosis is alcoholism. Signs and symptoms of cirrhosis include anorexia, indigestion, nausea, vomiting, abdominal pain, later including ascites, jaundice, and hepatomegaly. Treatment is designed to prevent further liver damage and to prevent and/or treat liver complications.

C. **Colorectal Cancer**

Colorectal cancer is the second most common form of cancer in the United States and Europe. Colorectal cancer has a slow progression and remains localized for long periods of time. If it is detected early, it has a 90% cure rate. The problem is many people are embarrassed to talk with their health care providers about changes in bowel habits and do not seek professional help until the cancer has spread and is more difficult to treat. The exact cause is unknown, but studies suggest a relationship to a high fat diet, aging, and a family history of colorectal cancer. The signs and symptoms of colorectal cancer include mild abdominal discomfort and a change in bowel habits. Treatment varies but may include surgery and chemotherapy.

D. **Gallstones**

Gallstones or cholelithiasis is the presence of stones in the gallbladder, resulting from changes in the bile component. The stones are made of cholesterol, calcium bilirubinate, and the bilirubin pigment. They arise during periods of sluggishness in the gallbladder due to pregnancy, obesity, and diabetes mellitus. It is the fifth leading cause of hospitalization among adults. Symptoms include a classic gallbladder attack that follows a meal rich in fats. It begins with abdominal pain in the right upper quadrant and may radiate to the back. Other features include fat intolerance, nausea, vomiting, and chills. A person may have clay-colored stools. Diagnosis is usually made with an ultrasound. Treatment involves the removal of the gallbladder and a low-fat diet.

E. Hepatitis

1. Hepatitis A

This is a highly contagious form of hepatitis and is usually transmitted by the fecal-oral route, commonly within institutions and families. The usual cause is the ingestion of contaminated food, milk, or water. The disease is marked by liver cells destruction, anorexia, jaundice, headache, nausea and vomiting. Also seen is a dark colored urine and clay colored stools. There is no specific treatment. The person should rest. Liver failure is a complication. Vaccines are available to reduce the incidence of this disease.

2. Hepatitis B

This is a highly contagious form of hepatitis that is transmitted by the direct exchange of contaminated blood. The disease is marked by liver cell destruction, anorexia, jaundice, headache, nausea, and vomiting. Also seen is dark colored urine and clay colored stools. There is no specific treatment. The person should rest. Liver failure is a complication. Vaccines are available to reduce the incidence of this disease. They are strongly recommended for all health care workers.

F. Obesity

Obesity is the presence of excess body fat, generally over 20% for men and over 30% for women. There are many precipitating causes, but the bottom line is that too many calories are consumed in comparison to the number of calories being used for energy. Precipitating factors include genetics, gender, and inactivity. Treatment includes a reduction of calories and an increase in exercise. Treatment may also include surgery, such as a gastric bypass or gastric banding to reduce the size of the stomach. Complications of obesity include joint pain, gallstones, hypertension, hyperlipidemia, atherosclerosis, heart attacks, strokes, and a predisposition to certain cancers.

G. Ulcers

Ulcers are lesions found in the mucosal membrane in the alimentary canal. They can develop in the esophagus, stomach, duodenum, or jejunum. The most common cause is a bacterial infection, followed by chronic use of non-steroidal anti-inflammatory drugs, like aspirin and ibuprofen. Other predisposing factors include genetics, exposure to alcohol and tobacco, and stress. Symptoms of ulcers include heartburn, indigestion, and pain. Other side effects include weight loss and GI bleeding. Treatment includes removing the cause, the use of antibiotics to treat the infection, watching for signs of bleeding and possible surgery.