Chapter 46
Digestive and Endocrine Disorders

Digestive Disorders

- The digestive system breaks down food so the body can absorb it.
- Solid waste is eliminated

Gastro-Esophageal Reflux Disease

- GERD
- Back flow of stomach contents into the esophagus
- Heartburn is the most common symptom
- S/S
Risk factors

- Over-weight
- Alcohol
- Pregnancy
- Smoking
- Large meals
- Lying down after eating
- Hiatal hernia
- Citrus fruits
- Chocolate
- Caffeine
- Fried and fatty foods
- Garlic
- Onions
- Spicy foods
- Tomato-based foods and sauces

Treatment

- Doctor may order medications to prevent stomach acid production or to promote stomach emptying
- Surgery to correct the hiatal hernia
- No smoking or drinking alcohol
- Losing weight
- Eating small meals
- Loose belts & clothes
- Not lying down for 3 hours pc
Vomiting

- Expelling stomach contents through the mouth
- It signals illness or injury.
- It can be life threatening
- Aspirated vomitus can obstruct the airway
- Vomiting large amounts of blood can lead to shock.

Treatment

- Follow standard precautions and the bloodborne pathogen standard
- Turn person's head well to one side to prevent aspiration.
- Place a basin nearby
- Remove vomitus
- Oral care
- Eliminate odors
- Change linens
- Observe for color, odor, & undigested food.
- Measure I & O
- Save specimen for lab
- Dispose of vomitus after nurse observes

Diverticular Disease

- Small pouches in the colon.
- Bulge outward through weak spots in the colon.
- Each pouch is called a diverticulum.
- The condition is called diverticulosis
- If they become infected diverticulitis
Risk

- Age is a risk factor
- Half of all Americans between 60-80 years
- A low-fiber diet and constipation.

Causes

- Feces enter the pouches, pouches become inflamed & infected.

Signs & Symptoms

- Abdominal pain & tenderness on lower left side of the abdomen.
- Fever, nausea & vomiting, chills, cramping, & constipation are likely.
- Bloating, rectal bleeding, frequent urination, and pain while urinating can occur.
- Ruptured pouch is rare. Life-threatening.
Treatment

- Dietary changes
- Antibiotics
- Surgery for severe disease, obstruction, & ruptured pouches
- Sometimes a colostomy is needed.

Gallstones

- Bile is a liquid made in the liver it is carried to the gallbladder
- Stored in the gallbladder until needed to digest fat.
- You have fried chicken and the gallbladder contracts sending bile through the ducts to the small intestines to aid in digestion.
- Gallstones form when bile hardens

Gallstones (cont)

- The stones block the bile flow
- The gallbladder and the bile ducts become inflamed
- Liver and pancreas involvement are possible
- Severe infections or damage can cause death
Persons at risk

- Women—especially women who are pregnant, use hormone replacement therapy, take birth control pills
- Over age 60
- Over-weight or obese
- Taking cholesterol-lowering medications
- Diabetics
- S/S

Hepatitis

- Inflammation of the liver caused by a virus
- S/S
- It can be mild or cause death
- Treatment involves rest, healthy diet, fluids, no alcohol
- Recovery takes about 8 weeks

Cont.

- Hepatitis A – spread by fecal-oral route
- Hepatitis B – spread by contaminated blood products, IV drug use, sexual contact, especially anal sex
- Hepatitis C – spread by blood to blood contact
Hepatitis A

• Spread by contaminated food or water
• Fecal-Oral route
• The virus is ingested when eating or drinking water contaminated with feces
• Eating or drinking from a contaminated vessel

Persons at Risk

• International travelers
• People who live with an infected person, or live in areas where children are not routinely vaccinated against Hep. A
• Day-care children and Staff
• Persons who engage in anal sex
• IV drug users

Treatment

• Involves rest
• A healthy diet
• Fluids
• No alcohol
• Recovery take 1-2 months
Prevention

- Good hand washing by everyone including the person. Assist persons with hand washing
- Persons with incontinence, confusion, & dementia can cause contamination
- Carefully look for contaminated items and areas.
- Handles, bedpans, feces, rectal thermometers carefully
- Hepatitis A vaccine

Hepatitis B (HBV)

- Spread through infected blood or blood products, saliva, semen, vaginal secretions of infected person
- IV drug use
- Accidental needle-sticks
- Sex without a condom, esp. anal sex
- Contaminated tools for tattoos, or body piercings
- Sharing toothbrush, razor, nail clippers
- Treatment is with medication

Prevention

- Hepatitis B Vaccination
- Series of 3 injections
- Your employer pays for it
- You can refuse the vaccination, but you must sign a statement refusing the vaccine
- You can have the vaccination at a later date.
Hepatitis C

- Spread by blood contaminated with hepatitis C. A person may have no symptoms for, but can transmit the disease.
- Serious liver disease and damage may show up years later.
- Treatment is with medication.

Persons at Risk

- IV drug users sharing needles & syringes
- Inhaling cocaine through a contaminated straw
- Contaminated tools used for tattoos or body piercings
- High-risk sexual activity – sex with infected person, or multiple sex partners
- Sharing toothbrush, razor, nail clippers

Hepatitis D & E

- Hepatitis D occurs only in people infected with hepatitis B. It is spread the same way as HBV.
- Hepatitis E is spread through food or water contaminated by feces from an infected person. It is spread by the fecal-oral route. This disease is not common in the United States.
Cirrhosis

• Is a liver condition caused by chronic liver damage.
• Has serious complications
• Infections, jaundice, bruising and bleeding
• Blood vessels in the esophagus, & stomach may enlarge & burst
• Gallstones may develop
• Toxins build up in the brain causing confusion, personality changes, memory loss

Care of persons with cirrhosis

• Use bedrails according to care plan
• Keep signal light within reach
• Observe vomitus & stools for blood
• Observe for signs of decreased mental function-confusion, memory loss, behavior changes, and so on
• Measure vital signs
• Measures intake & output
• Follow fluid restriction orders

Care cont.

• Weigh person daily
• Provide good skin care/lotion
• Turn/reposition q2h
• Provide mouth care q2h
• Use warm water with baking soda for bathing. The decreases itching.
• Assist with ADL's
Endocrine System

• Is made up of glands
• Endocrine glands secrete hormones that affect other organs and glands

Diabetes

• Is the most common endocrine disorder.
• The body cannot produce or use insulin properly.
• Insulin is needed for sugar to be able to be used by the cells.
• If cells do not have sugar, they cannot perform their function.
• The pancreas secretes insulin.

Three Types of Diabetes

• Type 1 – occurs most often in children & young adults. Pancreas secretes little or no insulin. Onset is rapid. Increased thirst & urination, constant hunger, weight loss, blurred vision, & extreme fatigue.

• Treated with daily insulin therapy, healthy eating and exercise.
Type 2 – occurs in adults. Persons over 40 years are at risk. Obesity & HTN are risk factors. The pancreas secretes insulin the body cannot use it well. Onset is slow.

Fatigue, nausea, frequent urination, increased thirst, weight loss, & blurred vision. Infections are frequent. Wounds heal slowly. Treated with healthy diet & exercise. Some take oral medications

Gestational diabetes – develops during pregnancy. It usually goes away after the baby. However, the woman is at risk for type 2 later in life.

Other Concerns

Type 2 some need insulin. Overweight persons need to lose weight.

Both types require blood glucose monitoring. **GOOD FOOT CARE IS NEEDED.** Corns, blisters, & calluses can lead to an infection and amputation.

The person's blood sugar can fall to low or go to high.
Complications

- Diabetes must be controlled. Otherwise complications occur.
- Blindness, renal failure, nerve damage, hypertension, & circulatory disorders.
- Circulatory disorders can lead to stroke, heart attack, and slow wound healing.
- Foot and leg wounds are very serious. Infection & gangrene can occur.

Hypoglycemia

- Means low (hypo) sugar (glyc) in the blood (emia)

Causes

- Too much insulin
- Omitting meals
- Delayed meal
- Eating too little food
- Increased exercise
- Vomiting
Signs & Symptoms

• Hunger
• headache
• low b/p
• Weakness
• diziness
• rapid, shallow respirations

• Trembling
• faintness
• Sweating
• rapid pulse
• cold, clammy skin
• Changes in vision
• Convulsions
• Unconsciousness

Treatment

• Call for the nurse at once
• Usually person will be given juice, candy, or glucose to raise blood sugar.
• Healthy eating
• Monitoring of blood sugar levels
• Exercise
• Good foot care

Hyperglycemia

• High [hyper] sugar [glyc] in the blood [emia]
Causes

• Undiagnosed diabetes
• Not enough insulin or diabetic drugs
• Eating too much food
• Too little exercise
• Physical or emotional stress

Signs & Symptoms

• Weakness
• Drowsiness
• Thirst
• Hunger
• Frequent urination
• Leg cramps
• Flushed face
• Sweet breath odor
• Rapid, weak pulse
• Slow, deep & labored respirations
• Low blood pressure
• Dry skin
• Blurred vision
• Headache
• Nausea & vomiting
• Convulsions
• Coma

Treatment

• Call nurse at once
• Healthy eating
• Monitoring blood sugar levels
• Exercise
• Good foot care