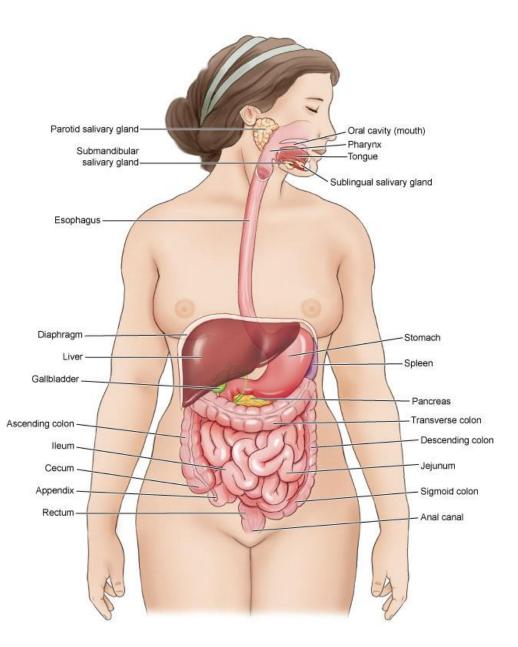
### Chapter 11

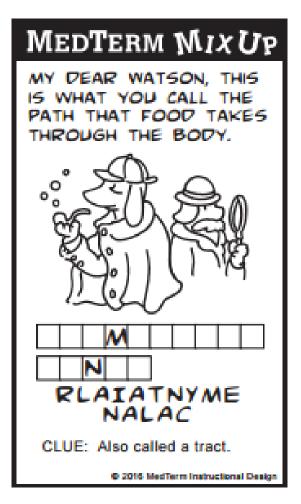
#### **Digestive System**



#### Chapter 11

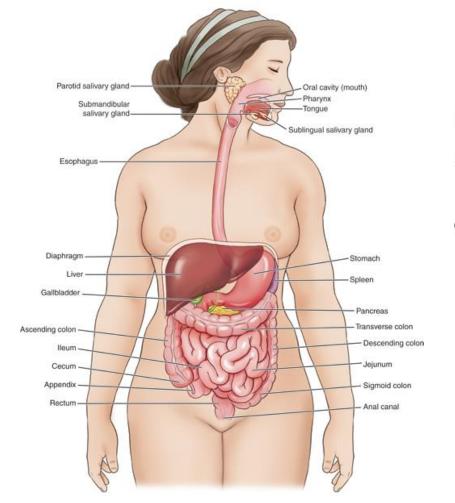
# **Objective 1:** Pronounce organs and anatomic structures of the digestive system.

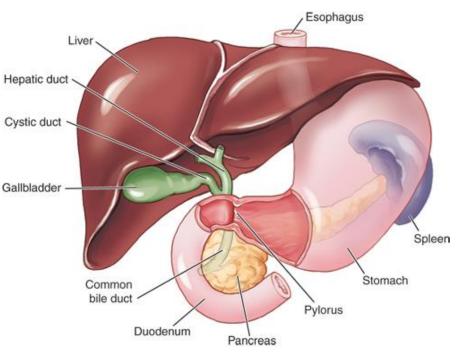
## Can you Help Watson and Holmes who are Exploring Medical Language...



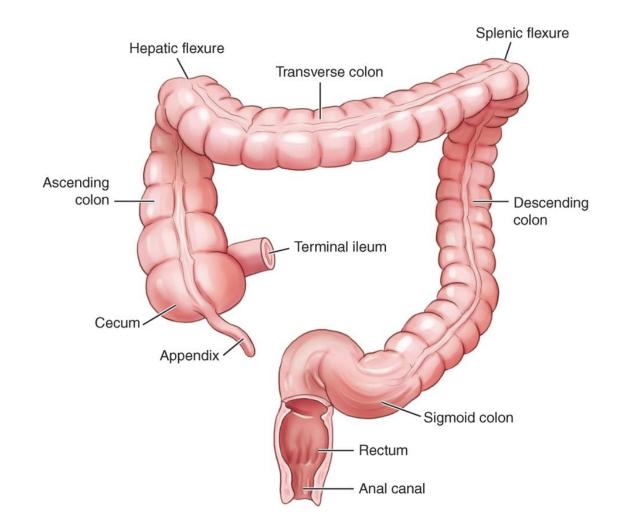
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#### Organs of the Digestive System

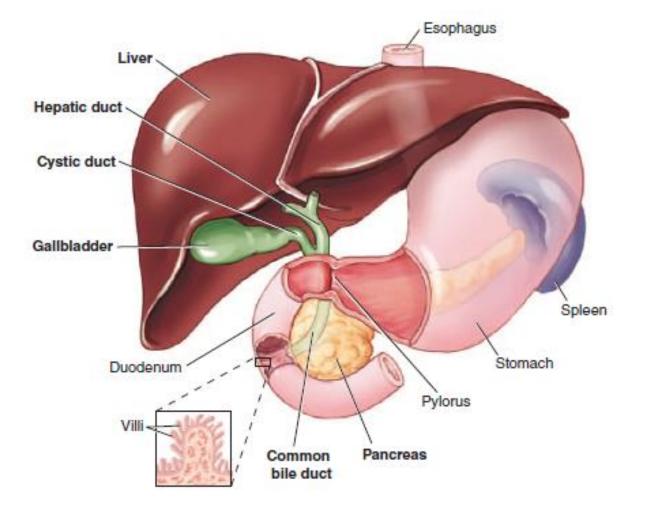




#### Anatomy of the Large Intestine



## Can you Pronounce these Accessory Organs?



#### Accessory Organ Review

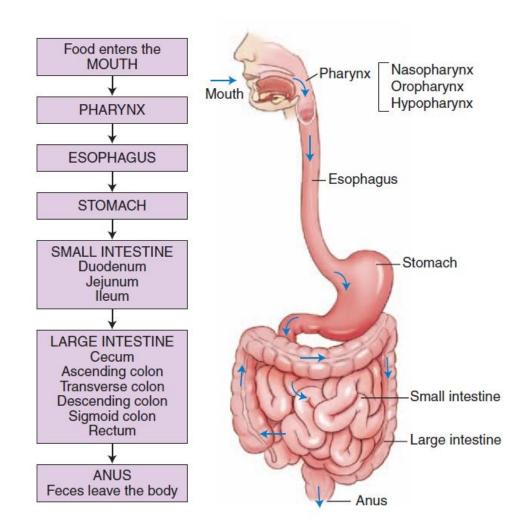
Can you pronounce these anatomic organs and structures for the digestive system from the following choices?

(GAWL-blad-er) (PAN-krē-us) (bīl) (dukts) (LIV-er) (SAL-i-ver-ē) (glandz)

- produces bile, which is necessary for the digestion of fats
- 2. passageways that carry bile
- 3. produce saliva
- 4. small, saclike structure that stores bile produced by the liver
- 5. secretes insulin for carbohydrate metabolism

- 1. (LIV-er)
- 2. (bīl) (dukts)
- 3. (SAL-i-ver-ē) (glandz)
- 4. (GAWL-blad-er)
- 5. (PAN-krē-us)

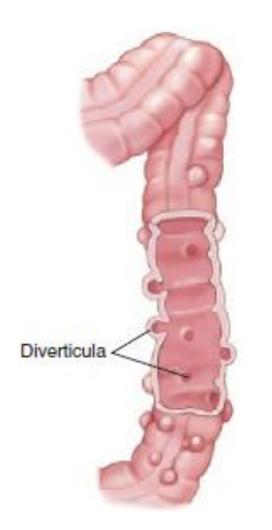
#### Pathway of Food



#### Chapter 11

# **Objective 2:** Define and spell word parts related to the digestive system.

#### **Diverticula of the Large Intestine**



Can you name the combining form for **diverticulum**, pl. diverticula?

#### diverticul/o

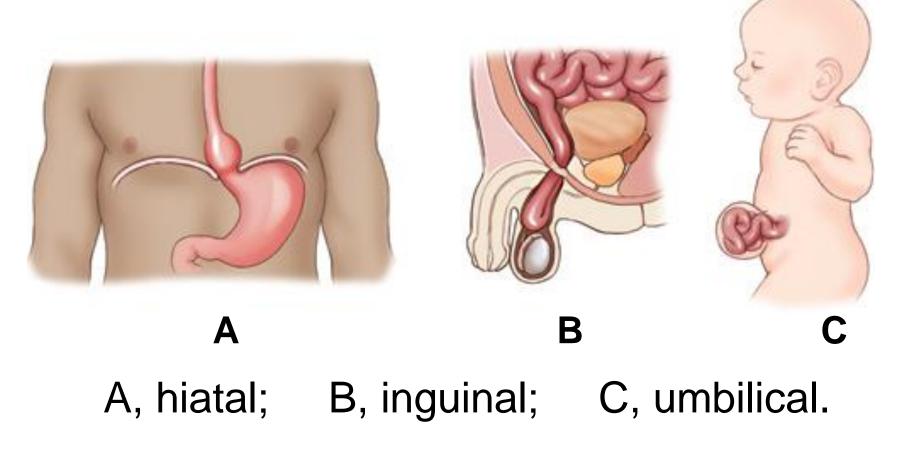
#### **Review Question**

### In choledocholithiasis, which is the word root that means stone?

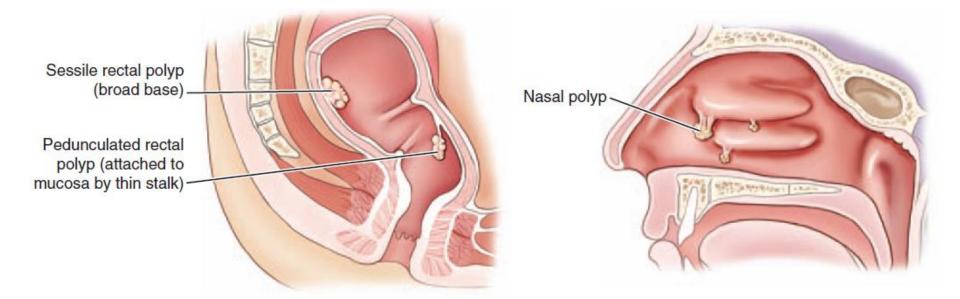
- a) doch
- b) lith
- c) chol

#### **Digestive Hernias**

### What is the combining form for hernia? herni/o



#### **Review Question**



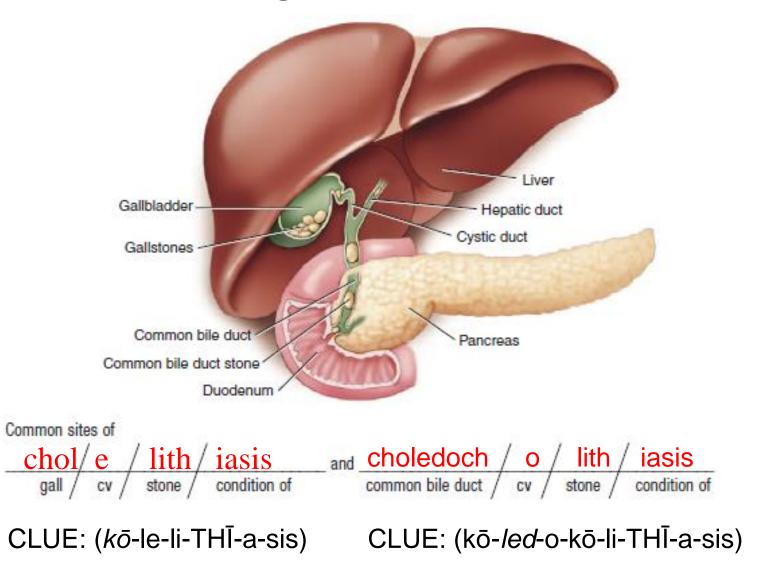
### What combining form means polyp, small growth?

#### polyp/o

### Chapter 11

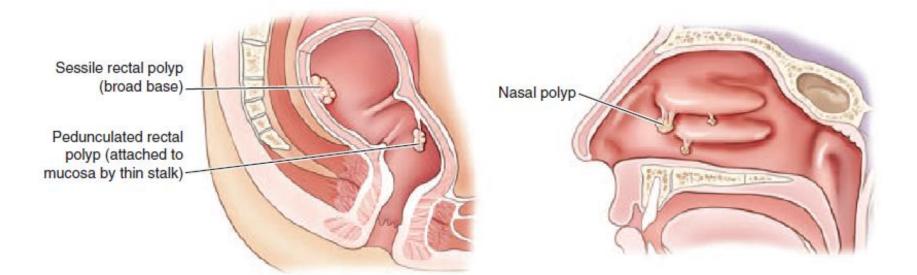
**Objective 3:** Define, pronounce, and spell disease and disorder terms related to the digestive system.

### Can you identify the word parts to properly spell these two disorders of the gallbladder and common bile duct?



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#### POLYP/O = polyp, small growth



### Can you name a disease and disorder term that makes use of polyp/o?

polyp/osis = abnormal condition of (multiple) polyps Pronunciation: (*pol*-i-PŌ-sis)

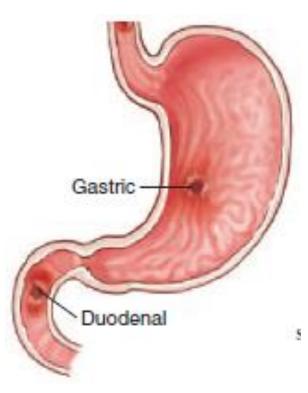
#### **Review Question**

### Which is inflammation of an anatomic structure of the mouth?

- a) proctitis
- b) uvulitis
- c) esophagitis

#### Disease and Disorder Terms Not Built from Word Parts

- ileus
- intussusception
- irritable bowel syndrome (IBS)
- obesity
- peptic ulcer
- polyp
- ulcerative colitis (UC)
- volvulus

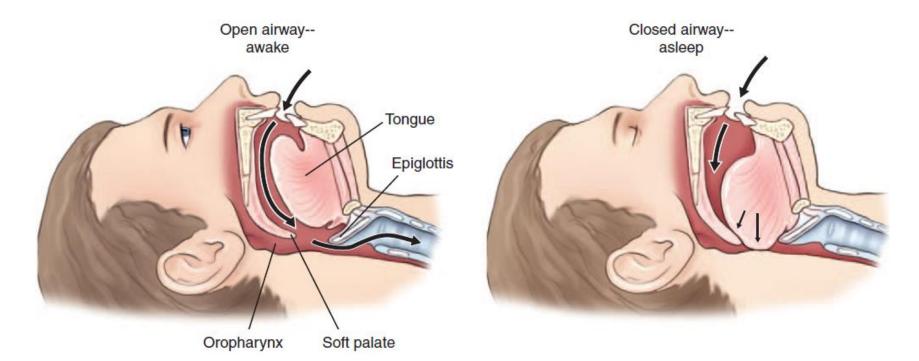


NAME?

#### **PEPTIC ULCERS**

#### Chapter 11

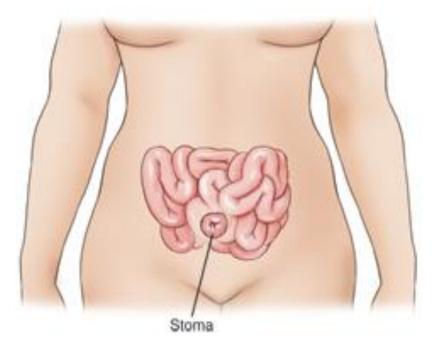
**Objective 4:** Define, pronounce, and spell surgical terms related to the digestive system. Which surgical procedure is performed to correct this condition of repetitive pharyngeal collapse during sleep, which leads to transient periods of apnea and can produce daytime drowsiness and elevated blood pressure (Chapter 5).

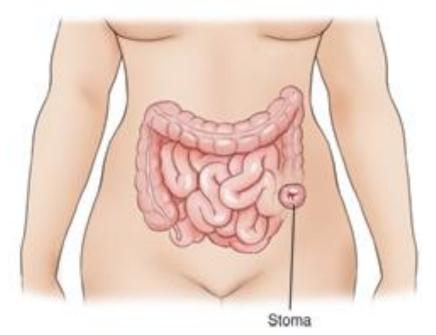


#### uvulopalatopharyngoplasty (UPPP) uvul/o/palat/o/pharyng/o/plasty

creation of an artificial opening into the ileum

### creation of an artificial opening into the colon

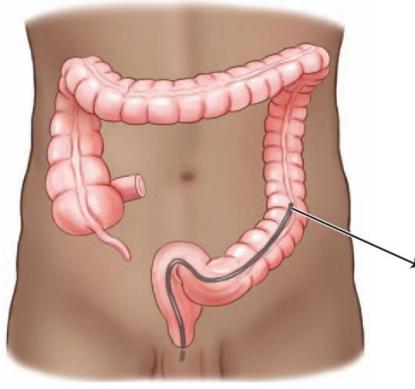




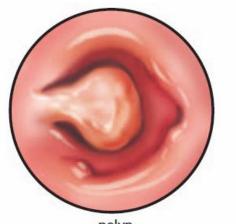
#### ile/o/stomy

#### col/o/stomy

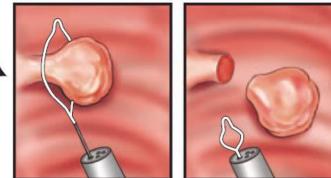
instrument used for visual examination of the colon



excision of a polyp



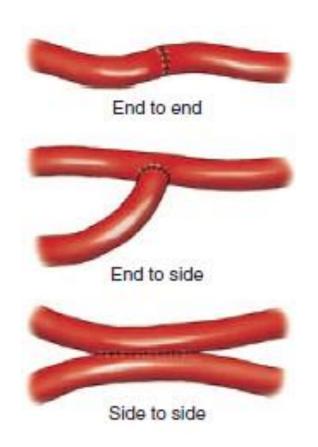
polyp



Removing a polyp with a snare

#### **Colonoscope and Polypectomy**

#### Surgical Terms Not Built from Word Parts



#### **Anastomoses (plural)**

#### **Review Question**

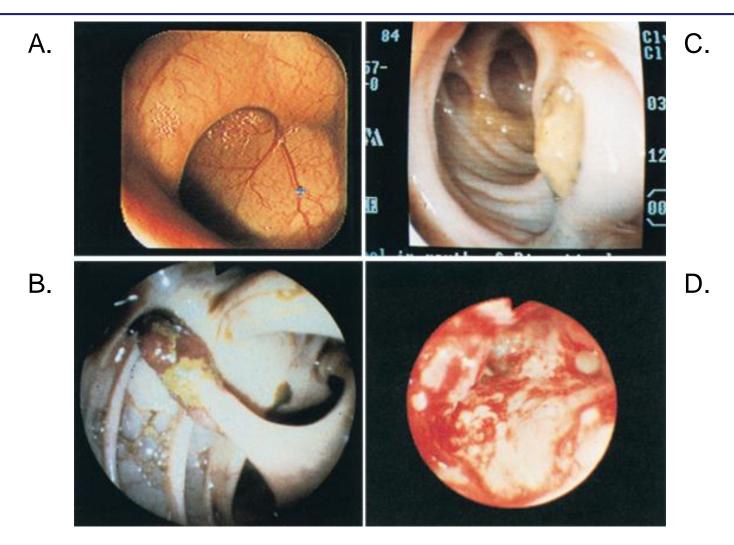
### Which term refers to the creation of an artificial opening?

- a) abdominocentesis
- b) colostomy

### Chapter 11

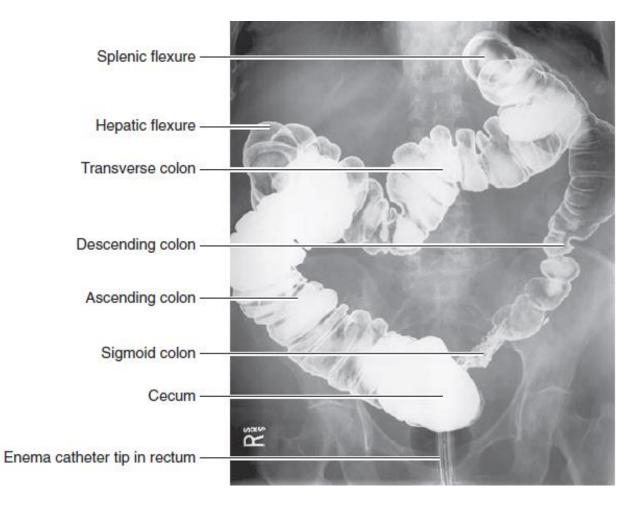
**Objective 5:** Define, pronounce, and spell diagnostic terms related to the digestive system.

#### Endoscopic Views Obtained at Colonoscopy



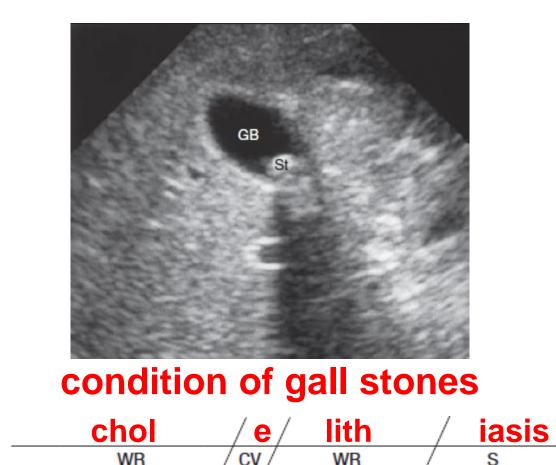
A. normal colon B. diverticulosis C. colon polyp D. colon cancer

#### What Is Barium Enema "Also Called"?



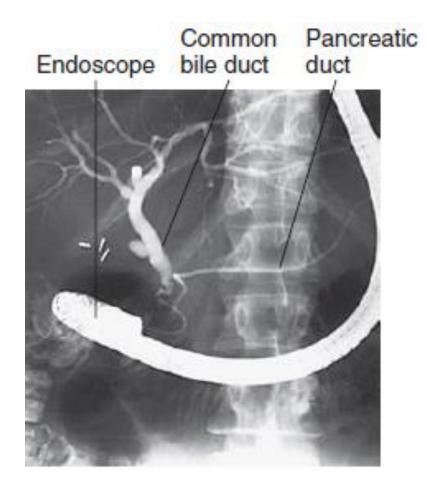
#### **Iower GI series**

### What abnormal finding is shown in this ABDOMINAL SONOGRAPHY of the gallbladder?



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In this procedure, contrast media is introduced (through an endoscope in the duodenum) into the biliary and pancreatic ducts ...



#### endoscopic retrograde cholangiopancreatography

### Chapter 11

**Objective 6:** Define, pronounce, and spell complementary terms related to the digestive system.

### Name the Specialty and Specialist likely to be performing this endoscopic exam.



#### **SPECIALTY:** gastroenterology

#### **SPECIALIST:** gastroenterologist

#### A CLOSER LOOK AT PROCT/O AND RECT/O

proct/o and rect/o are combining forms for rectum

#### PROCT/O terms

inflammation of the rectum proctitis

instrument used for visual examination of the rectum proctoscope

visual examination of the rectum proctoscopy

study of the rectum proctology

#### **RECT/O terms**

protrusion of the rectum rectocele

pertaining to the colon and rectum colorectal

pertaining to rectum rectal

#### Hematochezia

Hematochezia (*hē*-ma-tō-KĒ-zha) is a complementary term NOT built from word parts. Why are we "likely" to know something about its definition if we forget?

hemat/o = blood

-ia = diseased or abnormal state, condition of

(must have something to do with blood and an abnormal condition)

And if you know that "**chezo**" is Greek for feces, you will get closer to the definition ....

#### passage of visibly bloody feces

#### Symptoms of Acute Gastrointestinal Bleeding

- melena black, tarry stool that contains digested blood; usually a result of bleeding in the upper GI tract
- hematochezia passage of visibly bloody feces
- hematemesis vomiting of blood (may be red or have an appearance similar to coffee grounds)

### **Review Question**

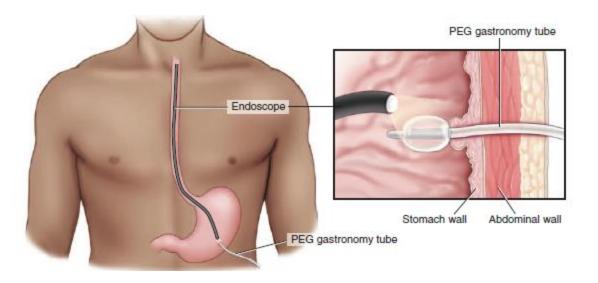
#### Emesis is synonymous with vomiting.

- a) True
- b) False

### Chapter 11

# **Objective 7:** Interpret the meaning of abbreviations related to the digestive system.

#### PEG



per	/ cutane / ous
through	/ skin / pertaining to
endo	/ scopic
within	/ pertaining to visual examination
gastr	/ o / stomy
stomach	/ cv /creation of an artificial opening

is a procedure used to place the gastrostomy tube into the stomach through the abdominal wall to administer liquids for nutrition and hydration.

#### **Abbreviations Review**

#### **Definition**

- series of radiographic images taken of the large intestine after the contrast agent barium has been administered rectally
- 2. periodic disturbances of bowel function, such as diarrhea and/or constipation, usually associated with abdominal pain
- 3. surgical repair of the uvula, palate, and pharynx
- 4. visual examination of the esophagus, stomach, and duodenum
- 5. removal of the distal colon, rectum, and anal sphincter through both abdominal and perineal approaches

#### **Abbreviation**

- 1. BE
- 2. IBS
- 3. UPPP
- 4. EGD
- 5. APR

#### Chapter 11

### **Objective 8:** Apply medical language in clinical contexts.

#### **Pronounce Medical Terms in Use**

#### **COLORECTAL CANCER**

**Colorectal** (kō-lō-REK-tal) cancer begins in the colon or rectum and is the second leading cause of cancer deaths in the United States. Most are adenocarcinomas that originate as a benign, adenomatous **polyp** (POL-ip).

Many people have no symptoms until the tumor is quite advanced, and symptoms vary depending on the location of the tumor. Warning signs are altered bowel habits, **rectal** (REK-tal) bleeding, **abdominal** (ab-DOM-i-nal) cramps, **flatus** (FLĀ-tus) and bloating, iron deficiency anemia, and weight loss.

Screening and diagnostic tests for colorectal cancer include digital rectal examination, **fecal** (FĒ-kl) **occult** (o-KULT) blood test, **sigmoidoscopy** (*sig*-moy-DOS-ko-pē), **colonoscopy** (kō-lon-OS-ko-pē), and **barium** (BAR-ē-um) **enema** (EN-e-ma). As well as being an important diagnostic tool, colonos-copy may be used for biopsy and for the removal of pedunculated **polyps.** To perform a **polypectomy** (*pol-*i-PEK-to-mē), a braided wire snare is inserted into the **colonoscope** (kō-LON-ō-skō-p). A snare loop, like a noose, is placed around the stem of the polyp. With electrosurgical power attached to the snare, the polyp is detached. The polyp is removed from the colon for histologic examination.

For cancer beyond the early stage, conventional surgery is the main treatment. The type of surgery depends on the location and stage of the tumor. Types of surgeries performed are left or right-sided **hemicolectomy** (*hem*-ē-kō-LEK-to-mē) with **anastomosis** (*a-nas*-to-MŌ-sis), sigmoid **colec-tomy** (kō-LEK-to-mē), and **abdominoperineal** (ab-*dom*-i-nō-*per*-i-NĒ-el) **resection** with **colostomy** (ko-LOS-to-mē). Currently, colorectal surgeons can sometimes perform low anterior resection (LAR), which preserves the anal sphincter and prevents the need for a colostomy.

# Comprehend Medical Terms in Use (1 of 2)

Test your comprehension of terms in the previous medical discussion by circling the correct answer.

- 1. Which of the following is used for diagnosing colorectal cancer?
- a. visual exam of the stomach
- b. series of radiographic images of the small intestine
- c. visual exam of the colon
- d. radiographic image of the esophagus

# Comprehend Medical Terms in Use (2 of 2)

- 2. T F A polypectomy may be performed during a colonoscopy.
- 3. T F Depending on the location of the tumor, a surgical treatment for colorectal cancer may be performed that creates an opening between the colon and abdominal wall for the passage of stool.
- 4. T F Vomiting blood is a warning sign for colorectal cancer.

#### Interpret Medical Terms (1 of 4)

To test your understanding of the terms introduced in this chapter, circle the words that correctly complete the sentences. The italicized words refer to the correct answer.

- 1. Mr. Fitz was diagnosed with *inflammation of the liver*, or (glossitis, hepatitis, palatitis).
- 2. An abdominal ultrasound confirmed a diagnosis of condition of gallstones, and Mr. Gomez is now scheduled for a laparoscopic *excision of the gallbladder,* or (cholecystostomy, cholecystectomy, colectomy).
- 3. The plural spelling of the term meaning *connection created by surgically joining two structures* is (**anastomoses**, **anastomosis, anastomosices**).

#### Interpret Medical Terms (2 of 3)

- The patient was diagnosed with a condition of inflammation of the colon and formation of ulcers, called (cirrhosis, ulcerative colitis, peptic ulcer).
- 5. A prolapse of the rectum is (rectocele, intussusception, proctoptosis).
- 6. An *abnormal growing together of two peritoneal surfaces* is (**anastomosis, adhesion, amniocentesis**).
- 7. Named for their location, gastric ulcers and duodenal ulcers are forms of *erosions of the mucous membrane of the stomach* and *duodenum* (irritable bowel syndrome, peptic ulcers, ulcerative colitis).

#### Interpret Medical Terms (3 of 4)

- 8. Tests used to diagnose peptic ulcers include Helicobacter pylori antibodies test, series of radiographic images taken of the pharynx, esophagus, stomach, and duodenum after the contrast agent barium has been administered orally (barium enema, upper GI series, endoscopic ultrasound), and visual examination of the pharynx, esophagus, stomach, and duodenum (esophagogastroduodenoscopy, endoscopic ultrasound, laparoscopy).
- Three surgical procedures that may be performed on a patient with peptic ulcers are (1) *excision of the stomach,* or (gastrotomy, gastrostomy, gastrectomy); (2) *surgical repair of the pylorus,* or (pyloroplasty, cheilorrhaphy, gastrojejunostomy); and (3) *cutting of certain branches of the vagus nerve,* or (colostomy, vagotomy, gingivectomy).

#### Interpret Medical Terms (4 of 4)

- 10. Surgical repair of the lip is (cheiloplasty, gastroplasty, palatoplasty).
- 11. Feeding a person through a gastric tube is called (lavage, gavage, gastrostomy).
- 12. The surgical procedures to remove the colon and rectum and create an artificial opening into the colon are (colectomy and colostomy, abdominoperineal resection and colostomy, abdominoperineal resection and ileostomy).
- To rule out cancer of the colon, the doctor performed a diagnostic procedure to *visually examine the colon* or (colonoscopy, colonoscope, colostomy).

#### Interpret Medical Terms (4 of 4)

- The doctor diagnosed the patient as having an obstruction of the intestine or (polyp, irritable bowel syndrome, ileus).
- 15. The following test is used to screen for colon cancer (fecal occult blood test, *Helicobacter pylori* antibodies test, upper GI series).
- 16. (Stoma, Stomata, Stomaes) is the plural spelling of the term meaning *surgical opening between an organ and the surface of the body.*