

Gomel State Medical University

The faculty of foreign students

Department of foreign languages

Subject: English

PRACTICAL CLASS 7
for the 1st year students, 2nd semester

Topic:

Digestive System: term-elements used to make the names of digestive disorders

Aims:

- to learn the basic term-elements used to make the names of digestive disorders
- to define the meaning of the clinical terms denoting digestive disorders
- to learn to make the clinical terms denoting digestive disorders using Greek term-elements

Questions:

1. What Greek root term-elements are used to make clinical terms denoting digestive disorders?
2. What are the final term-elements used to make clinical terms denoting digestive disorders?
3. Which Greek term-elements have their Latin double equivalents?

PRACTICAL PART OF THE CLASS

I. Learn the following term-elements

COMBINING FORM	MEANING	TERMINOLOGY	MEANING
an/o	anus	perianal _____	
append/o	appendix	appendectomy _____	
appendic/o		appendicitis _____ <i>Figure 5-13.</i>	
bucc/o	cheek	buccal mucosa _____ <i>A mucosa is a mucous membrane lining cavities or canals that open to the outside of the body.</i>	
cec/o	cecum	cecal _____	
celi/o	belly, abdomen	celiac _____ <i>Abdomin/o and lapar/o also mean abdomen. With combining forms that have the same basic meaning, no rule exists for the proper usage of one or the other. You will learn to recognize each in its proper context.</i>	
cheil/o	lip	cheilosis _____ <i>Labi/o also means lip.</i>	
cholecyst/o	gallbladder	cholecystectomy _____ <i>Don't confuse cholecyst/o with cyst/o, which means urinary bladder!</i>	

choledoch/o	common bile duct	choledochotomy _____
col/o	colon, large intestine	colostomy _____ <i>The suffix -stomy, when used with a combining form for an organ, means an opening to the outside of the body. A stoma is an opening between an organ and the surface of the body (Figure 5-14).</i>
colon/o	colon	colonic _____ colonoscopy _____
dent/i	tooth	dentibuccal _____ <i>Odont/o also means tooth.</i>
duoden/o	duodenum	duodenal _____
enter/o	intestines, usually small intestine	enterocolitis _____ <i>When two combining forms for gastrointestinal organs are in a term, the one for the organ closer to the mouth appears first.</i> enteroenterostomy _____ <i>New opening between two previously unconnected parts of the small intestine. This is an anastomosis, which is any surgical connection between two parts, such as vessels, ducts, or bowel segments (ana = up, stom = opening, -sis = state of) (Figure 5-15).</i> mesentery _____ <i>Part of the double fold of peritoneum that stretches around the organs in the abdomen, the mesentery holds the organs in place. Literally, it lies in the middle (mes-) of the intestines, a membrane attaching the intestines to the muscle wall at the back of the abdomen (Figure 5-16).</i> parenteral _____ <i>Par (from para-) means apart from in this term. An intravenous line brings parenteral nutrition directly into the bloodstream, bypassing the intestinal tract (enteral nutrition). Parenteral injections may be subcutaneous or intramuscular as well.</i>
esophag/o	esophagus	esophageal _____ <i>Note: Changing the suffix from -al to -eal softens the final g (ě-sŏf-ă-JĔ-dl).</i>
faci/o	face	facial _____
gastr/o	stomach	gastrostomy _____
gingiv/o	gums	gingivitis _____
gloss/o	tongue	hypoglossal _____ <i>Lingu/o also means tongue.</i>
hepat/o	liver	hepatoma _____ <i>Also called hepatocellular carcinoma.</i> hepatomegaly _____
ile/o	ileum	ileocecal sphincter _____ <i>Also called the ileocecal valve.</i> ileitis _____ ileostomy _____ <i>See Figure 5-14B, page 156.</i>

jejun/o	jejunum	choledochojejunostomy _____ <i>An anastomosis.</i> gastrojejunostomy _____ <i>This is part of a gastric bypass procedure.</i>
labi/o	lip	labial _____
lapar/o	abdomen	laparoscopy _____ <i>A form of minimally invasive surgery (MIS). Examples are laparoscopic cholecystectomy and laparoscopic appendectomy.</i>
lingu/o	tongue	sublingual _____
mandibul/o	lower jaw, mandible	submandibular _____
odont/o	tooth	orthodontist _____ <i>Orth/o means straight.</i> periodontist _____ endodontist _____ <i>Performs root canal therapy.</i>
or/o	mouth	oral _____ <i>Stomat/o also means mouth.</i>
palat/o	palate	palatoplasty _____ <i>Procedure to repair cleft palate and cleft lip; repair of a cleft palate.</i>
pancreat/o	pancreas	pancreatitis _____
peritone/o	peritoneum	peritonitis _____ <i>The e of the root has been dropped in this term.</i>
pharyng/o	throat	pharyngeal _____ palatopharyngoplasty _____ <i>Used to treat cases of snoring or sleep apnea caused by obstructions in the throat or nose.</i>
proct/o	anus and rectum	proctologist _____
pylor/o	pyloric sphincter	pyloroplasty _____
rect/o	rectum	rectocele _____
sialaden/o	salivary gland	sialadenitis _____
sigmoid/o	sigmoid colon	sigmoidoscopy _____
stomat/o	mouth	stomatitis _____
uvul/o	uvula	uvulectomy _____

SUBSTANCES

COMBINING FORM	MEANING	TERMINOLOGY	MEANING
amyl/o	starch	amylase _____ <i>The suffix -ase means enzyme.</i>	

bil/i	gall, bile	<u>biliary</u> _____ <i>The biliary tract includes the organs (liver and gallbladder) and ducts (hepatic, cystic, and common bile ducts) that secrete, store, and empty bile into the duodenum.</i>
bilirubin/o	bilirubin (bile pigment)	hyper <u>bilirubinemia</u> _____
chol/e	gall, bile	<u>cholelithiasis</u> _____ <i>Lith/o means stone or calculus; -iasis means abnormal condition.</i>
chlorhydr/o	hydrochloric acid	<u>achlorhydria</u> _____ <i>Absence of gastric juice is associated with gastric carcinoma.</i>
gluc/o	sugar	<u>gluconeogenesis</u> _____ <i>Liver cells make new sugar from fats and proteins.</i>
glyc/o	sugar	hyper <u>glycemia</u> _____
glycogen/o	glycogen, animal starch	<u>glycogenolysis</u> _____ <i>Liver cells change glycogen back to glucose when blood sugar levels drop.</i>
lip/o	fat, lipid	<u>lipoma</u> _____
lith/o	stone	<u>lithogenesis</u> _____
prote/o	protein	<u>protease</u> _____
sial/o	saliva, salivary	<u>sialolith</u> _____
steat/o	fat	<u>steatorrhea</u> _____ <i>Improperly digested (malabsorbed) fats will appear in the feces.</i>

SUFFIXES

SUFFIX	MEANING	TERMINOLOGY	MEANING
-ase	enzyme	<u>lipase</u> _____ <i>Enzymes speed up chemical reactions. Lipase aids in the digestion of fats. In all types of liver disease, liver enzyme levels may be elevated, indicating damage to liver cells. Signs and symptoms include malaise, anorexia, hepatomegaly, jaundice, and abdominal pain.</i>	
-chezia	defecation, elimination of wastes	<u>hematochezia</u> _____ <i>(hě-mă-tō-KĒ-zē-ă) Bright red blood is found in the feces.</i>	
-iasis	abnormal condition	<u>choledocholithiasis</u> _____	
-prandial	meal	<u>postprandial</u> _____ <i>Post cibum (p.c.), seen on written prescriptions, also means after meals.</i>	

II. Train these term-elements to make the terms denoting digestive disorders



EXERCISES

Remember to check your answers carefully with the Answers to Exercises, page 178.

A Match the following digestive system structures with their meanings below.

anus	esophagus	liver
cecum	gallbladder	pancreas
colon	ileum	pharynx
duodenum	jejunum	sigmoid colon

1. consisting of ascending, transverse, descending, and sigmoid segments _____
2. small sac under the liver; stores bile _____
3. first part of the large intestine _____
4. end of the digestive tract opening to the outside of the body _____
5. second part of the small intestine _____
6. tube connecting the throat to the stomach _____
7. third part of the small intestine _____
8. large organ located in the RUQ; secretes bile, stores sugar, produces blood proteins

9. throat _____
10. lowest part of the colon _____
11. first part of the small intestine _____
12. organ under the stomach; produces insulin and digestive enzymes _____

B Circle the term that fits the given definition. You should be able to define the other terms as well!

1. **microscopic projections in the walls of the small intestine:**
papillae villi rugae
2. **salivary gland near the ear:**
submandibular sublingual parotid
3. **ring of muscle at the end of the stomach:**
pyloric sphincter uvula lower esophageal sphincter
4. **soft, inner section of a tooth:**
dentin enamel pulp
5. **chemical that speeds up reactions and helps digest foods:**
triglyceride amino acid enzyme
6. **pigment released with bile:**
glycogen bilirubin melena
7. **hormone produced by endocrine cells of the pancreas:**
insulin amylase lipase

8. **rhythm-like contraction of the muscles in the walls of the gastrointestinal tract:**
deglutition mastication peristalsis
9. **breakdown of large fat globules:**
absorption emulsification anabolism
10. **pointed, dog-like tooth medial to premolars:**
incisor canine molar

C Complete the following.

1. Labi/o and cheil/o both mean _____.
2. Gloss/o and lingu/o both mean _____.
3. Or/o and stomat/o both mean _____.
4. Dent/i and odont/o both mean _____.
5. Lapar/o and celi/o both mean _____.
6. Gluc/o and glyc/o both mean _____.
7. Lip/o, steat/o, and adip/o all mean _____.
8. The suffixes -iasis and -osis both mean _____.
9. Chol/e and bil/i both mean _____.
10. Resection and -ectomy both mean _____.

D Build medical terms based on the given definitions.

1. removal of a salivary gland _____
2. pertaining to the throat _____
3. hernia of the rectum _____
4. enlargement of the liver _____
5. surgical repair of the roof of the mouth _____
6. after meals _____
7. visual examination of the anal and rectal region _____
8. study of the cause (of disease) _____
9. incision of the common bile duct _____
10. pertaining to teeth and cheek _____
11. disease condition of the small intestine _____
12. new opening between the common bile duct and the jejunum _____
13. pertaining to surrounding the anus _____
14. new opening from the colon to the outside of the body _____
15. under the lower jaw _____
16. pertaining to the face _____

E Match the following doctors or dentists with their specialties.

colorectal surgeon
endodontist
gastroenterologist

nephrologist
oral surgeon
orthodontist

periodontist
proctologist
urologist

1. treats disorders of the anus and rectum _____
2. operates on the organs of the urinary tract _____
3. straightens teeth _____
4. performs root canal therapy _____
5. operates on the mouth and teeth _____
6. treats kidney disorders _____
7. diagnoses and treats gastrointestinal disorders _____
8. treats gum disease _____
9. operates on the intestinal tract _____

F Build medical terms to describe the following inflammations.

1. inflammation of the appendix _____
2. inflammation of the large intestine _____
3. inflammation of the passageway from the throat to the stomach _____
4. inflammation of the membrane surrounding the abdomen _____
5. inflammation of the gallbladder _____
6. inflammation of the third part of the small intestine _____
7. inflammation of the pancreas _____
8. inflammation of the gums _____
9. inflammation of the liver _____
10. inflammation of the mouth _____
11. inflammation of the salivary gland _____
12. inflammation of the small and large intestines _____

G Match the following terms with their meanings below.

anastomosis
biliary
defecation
cheilitis

gluconeogenesis
glycogenolysis
hyperbilirubinemia
hyperglycemia

mesentery
mucosa
parenteral
portal vein

1. high level of blood sugar _____
2. inflammation of the lip _____
3. pertaining to administration of medicines and fluid other than by mouth _____
4. mucous membrane _____
5. expulsion of feces from the body through the anus _____
6. breakdown (conversion) of starch to sugar _____
7. fan-like membrane that connects the small intestine to the abdominal wall _____

8. large vessel that takes blood to the liver from the intestines _____
9. new surgical connection between structures or organs _____
10. pertaining to bile ducts _____
11. process of forming new sugar from proteins and fats _____
12. high levels of a bile pigment in the bloodstream _____

Match the following terms with the definitions in the numbered list.

<i>anorexia</i>	<i>dysphagia</i>	<i>hematemesis</i>
<i>cachexia</i>	<i>dyspnea</i>	<i>lesion</i>
<i>cirrhosis</i>	<i>fecalith</i>	<i>melen</i>
<i>dyspepsia</i>	<i>halitosis</i>	<i>obstipation</i>

1. _____ vomiting blood
2. _____ difficulty swallowing or inability to swallow
3. _____ fecal concretion
4. _____ "bad" breath
5. _____ loss of appetite
6. _____ poor digestion
7. _____ degenerative liver disease
8. _____ state of ill health, malnutrition, and wasting
9. _____ intractable constipation
10. _____ open sore