



## 64a Pathology: Digestive System



# 64a Pathology: Digestive System

## Class Outline

5 minutes	Attendance, Breath of Arrival, and Reminders
10 minutes	Lecture:
25 minutes	Lecture:
15 minutes	Active study skills:
60 minutes	Total



# 64a Pathology: Digestive System

## Class Reminders

### **ABMP Exam Coach**

- “Access your ABMP account” using instructions on page A-74
- Familiarize yourself with ABMP Exam Coach, especially the “Study Subjects” section
- Preview the preparation assignments for MBLEx Prep classes (74a, 75a, 80a, 81a, 84a, 86a, 87a)

### **Assignments:**

- 64b Executive Summary (due before the end of class)  
Packet pages 21-22; Sections 1-4 to be done *in* class.  
Completed Executive Summary to be handed in at end of class.
- 66a Review Questions (due before class starts)

### **Quizzes and Exams:**

- 66a Quiz (59a, 61a, 62a, 63a, 64a/b, 65a/b)
- 68a Kinesiology Quiz

### **Preparation for upcoming classes:**

- 65a A&P: Urinary System  
Packet E: 165-170.; RQ – Packet A-204 – 205
- 65b Business: Meet Employers and Self-Employed Therapists  
Packet B: 25; Have 10 questions to ask the panelists.



# Classroom Rules

**Punctuality** - everybody's time is precious

- Be ready to learn at the start of class; we'll have you out of here on time
- Tardiness: arriving late, returning late after breaks, leaving during class, leaving early

**The following are not allowed:**

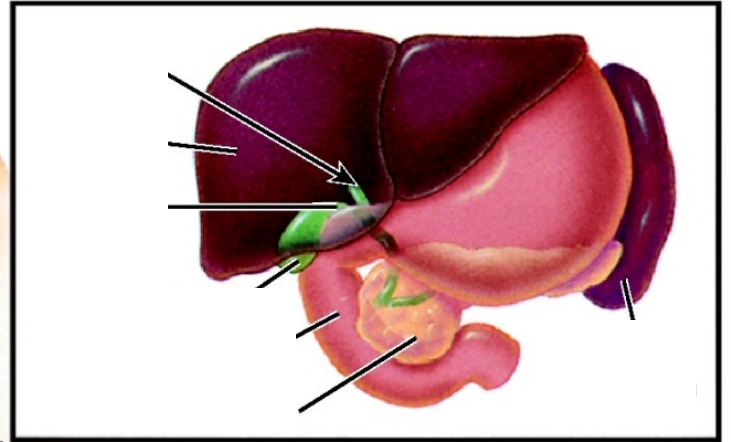
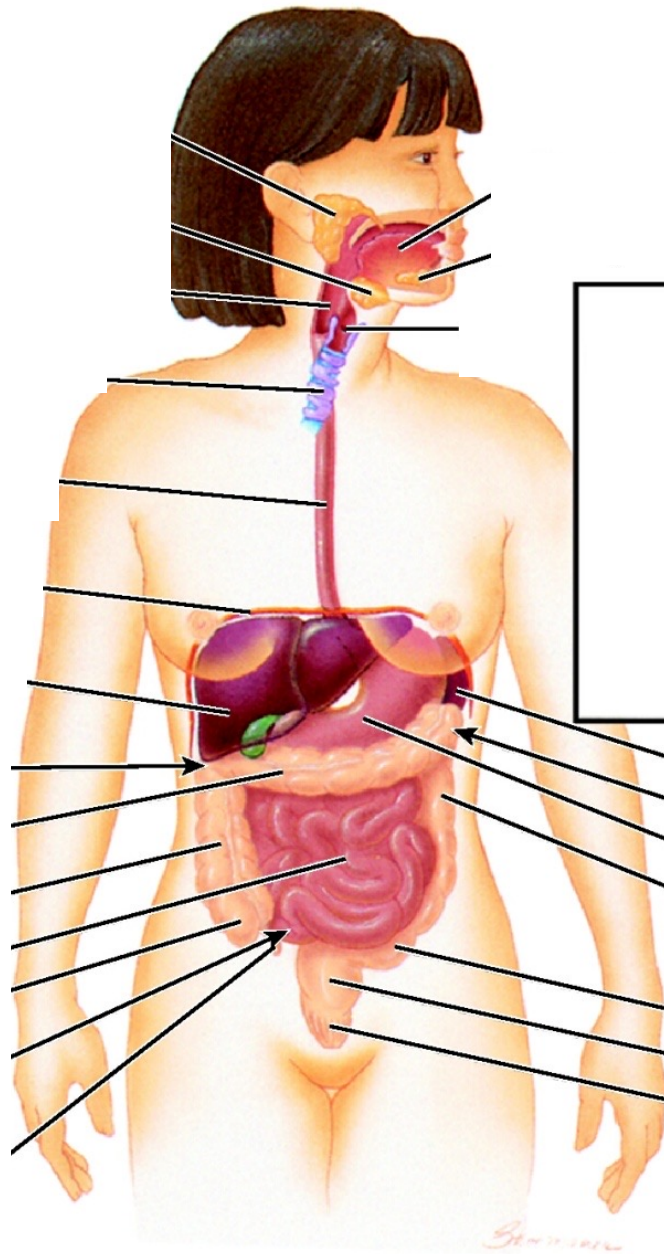
- Bare feet
- Side talking
- Lying down
- Inappropriate clothing
- Food or drink except water
- Phones that are visible in the classroom, bathrooms, or internship

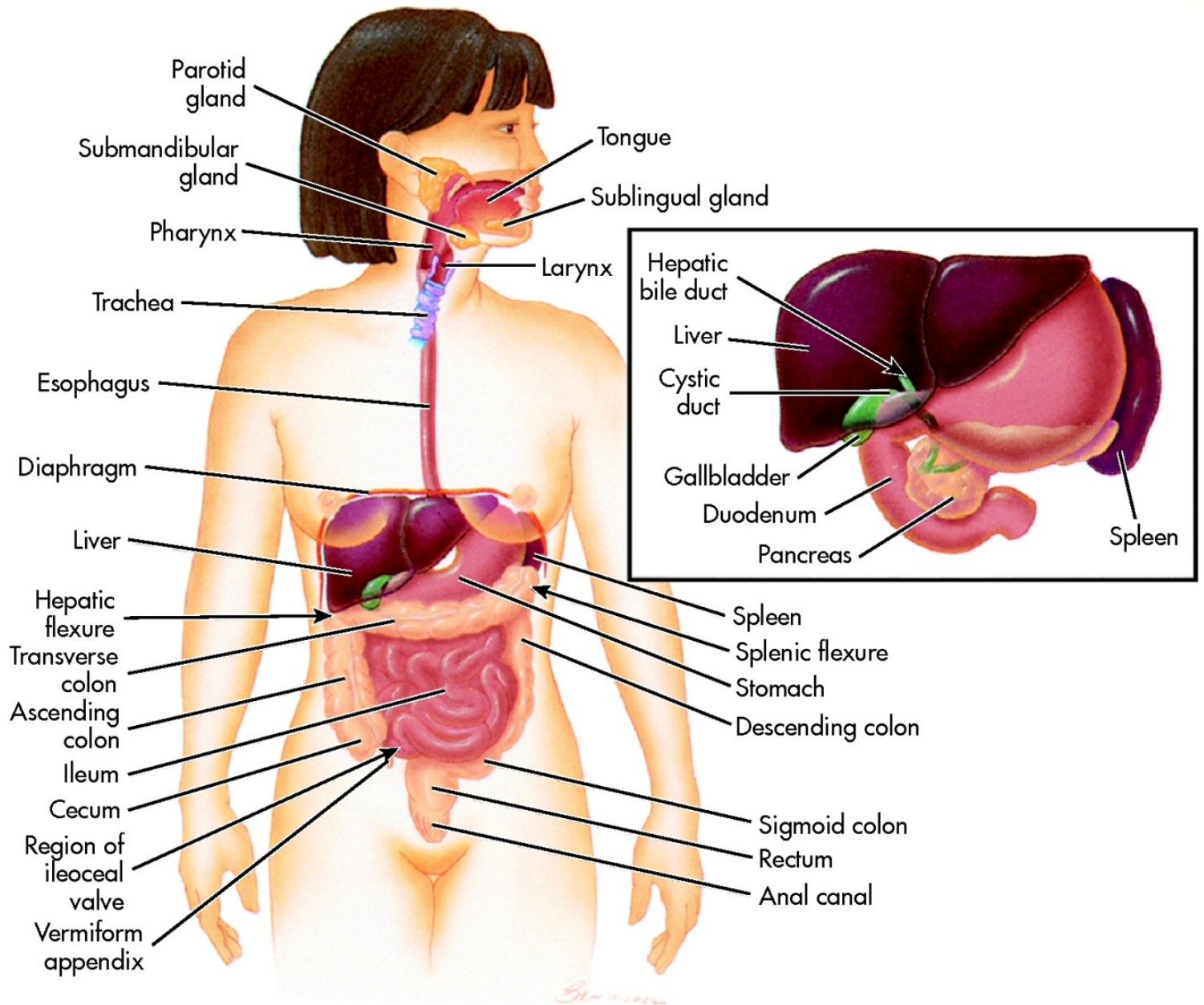
*You will receive one verbal warning, then you'll have to leave the room.*



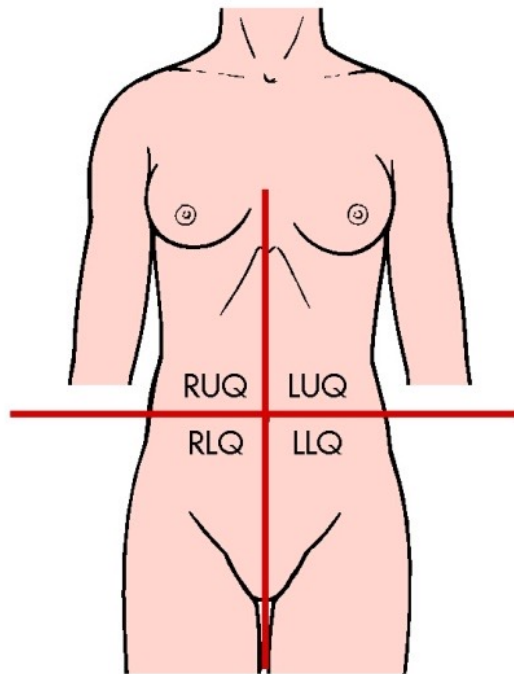
## 64a Pathology: Digestive System

Packet E - 161

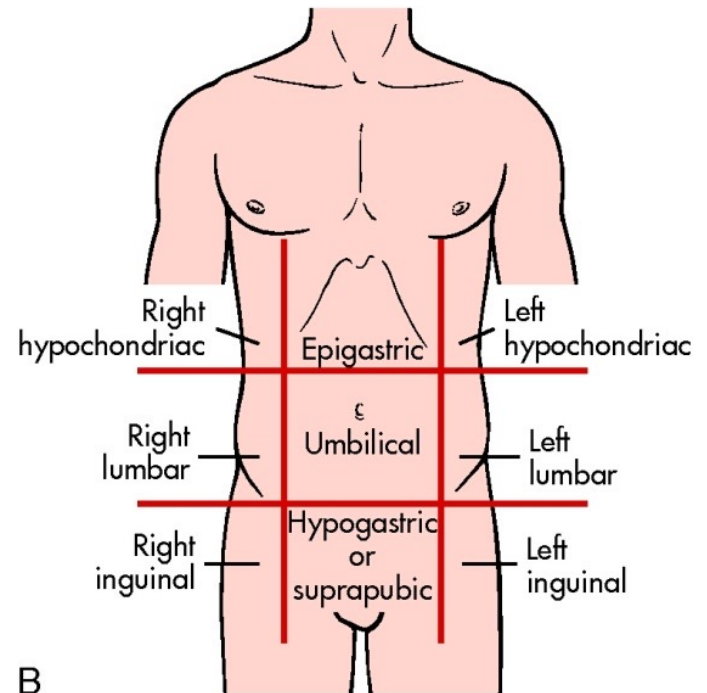




**Hypochondrium** Area below the cartilage of the ribs.

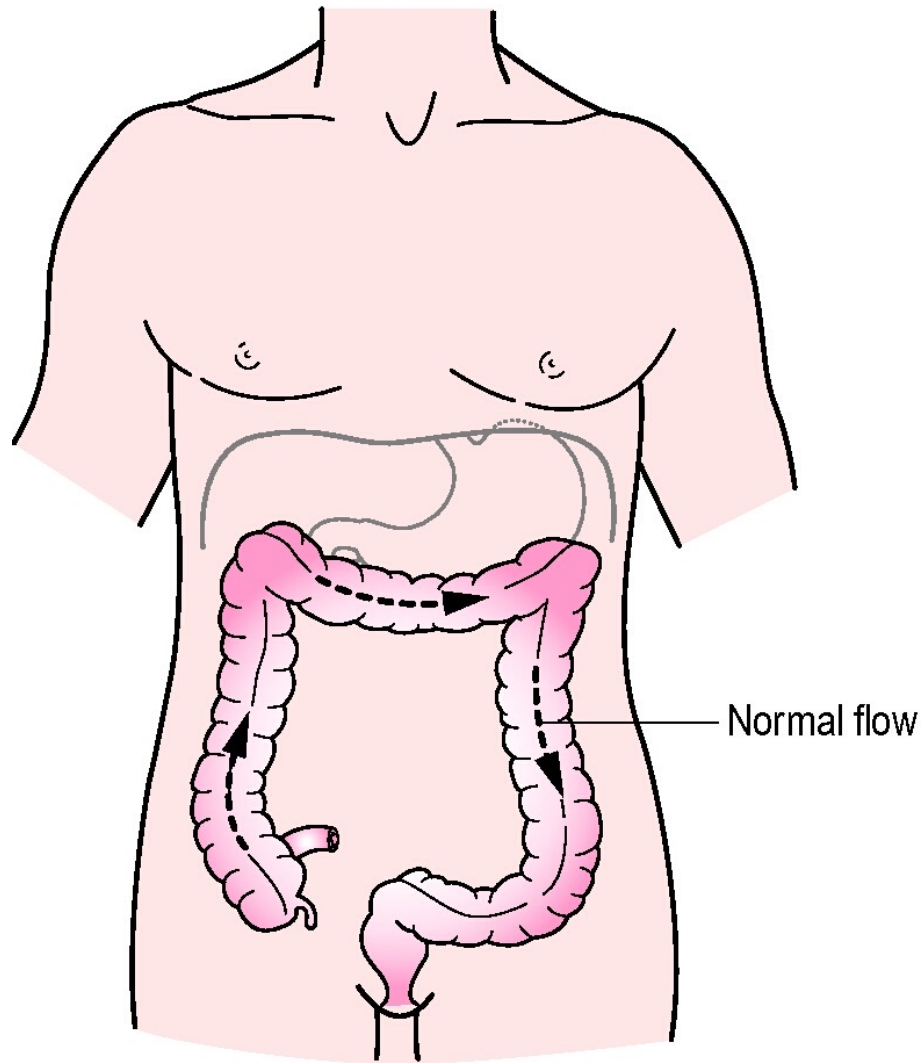


A

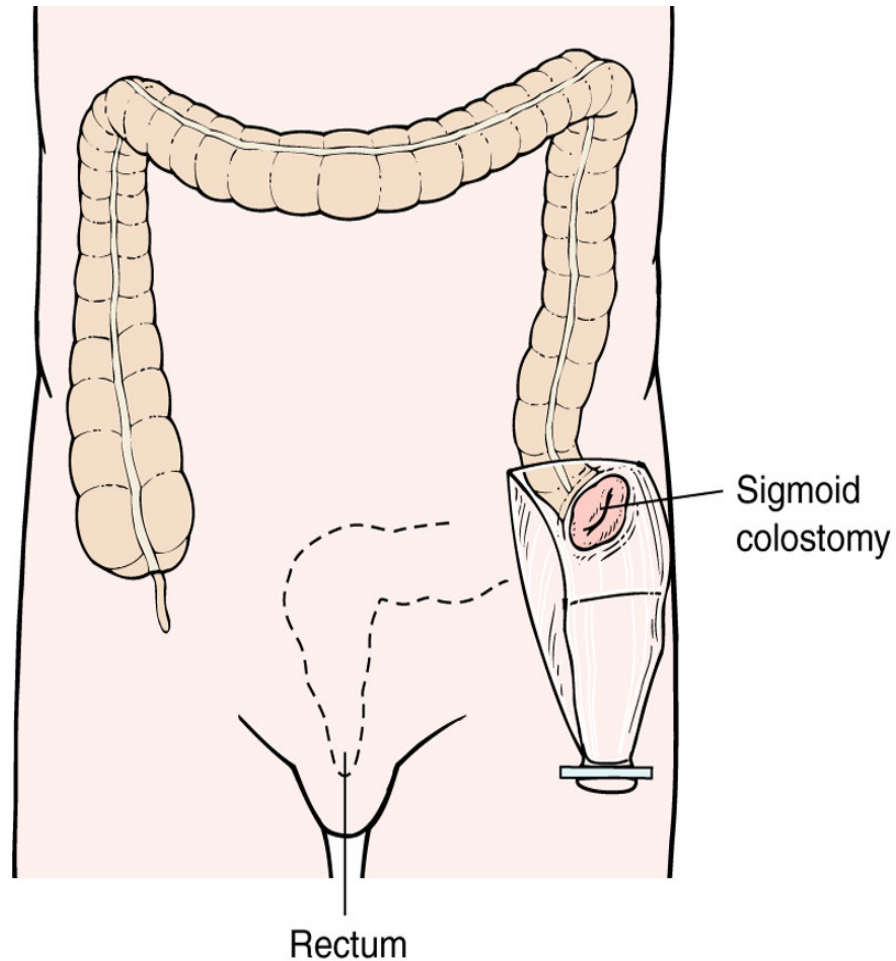


B





**Stoma** Opening, either natural or surgically created, which connects a portion of the body cavity to the outside environment.





**Cecostomy** Cecum

**Colostomy** Colon

**Duodenostomy** Duodendum

**Ileostomy** Ileum

**Jejunostomy** Jejunum

**Appendicostomy** Vermiform appendix

**Esophagostomy** Esophagus

**Gastrostomy** Stomach

**Cholecystostomy** Gallbladder

**Tracheostomy** Trachea

**Nephrostomy** Kidney

**Ureterostomy** Ureter

**Vesicostomy** Urinary bladder



# Disorders of the Upper Gastrointestinal Tract

Celiac disease

Gastroenteritis

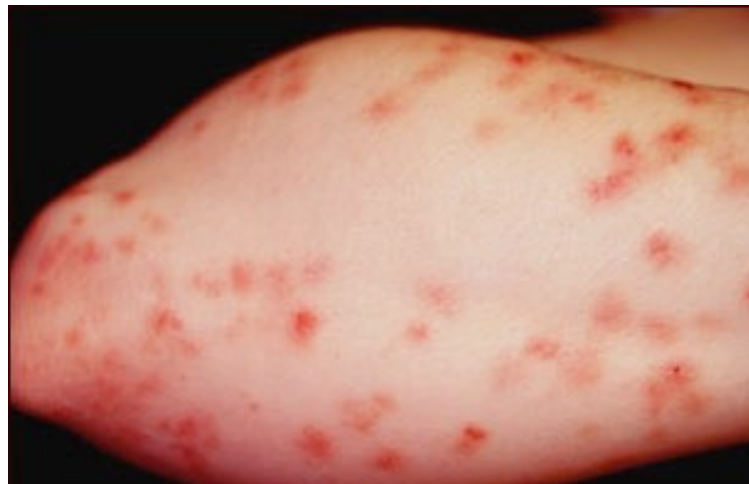
Gastroesophageal reflux disease

Peptic ulcer

# Disorders of the Upper Gastrointestinal Tract

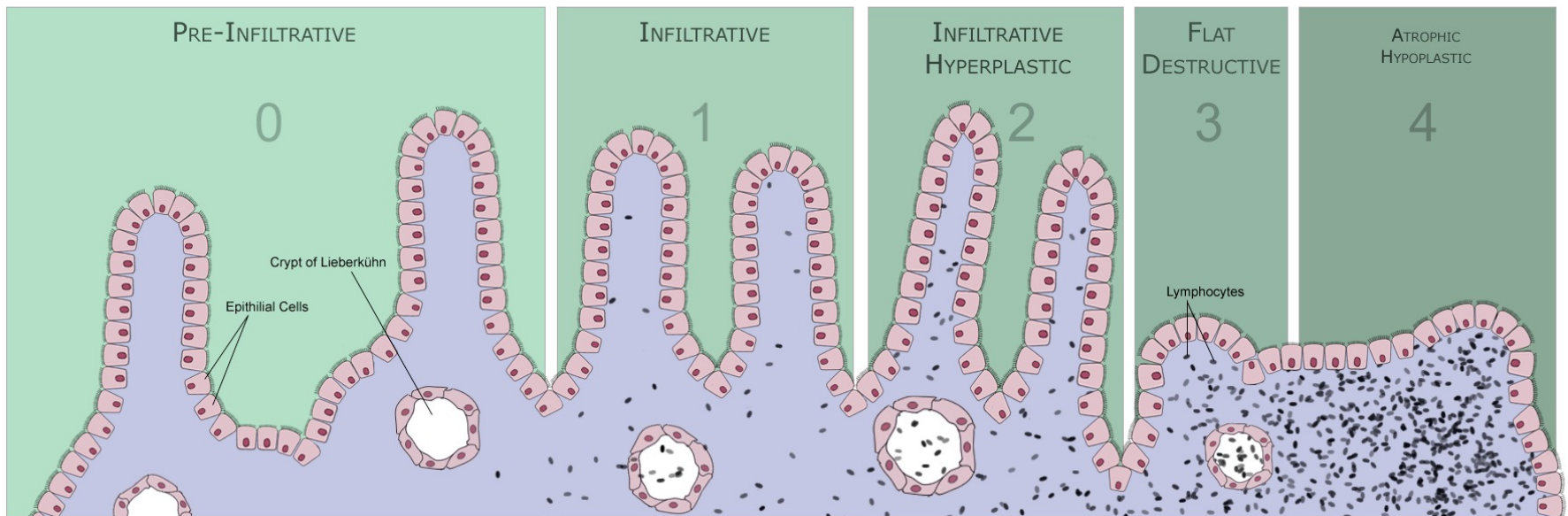
**Celiac disease** Inflammatory response to the consumption of gluten. Destroys intestinal villi and limits absorption of ingested nutrients. Symptoms include gas, bloating, diarrhea.

**Dermatitis herpetiformis** Painful, itchy rash due to celiac disease.



# Celiac Disease

## UPPER JEJUNAL MUCOSAL IMMUNOPATHOLOGY



# Disorders of the Upper Gastrointestinal Tract

**Gastroenteritis** Inflammation of the G.I. tract, specifically the stomach or small intestine. Symptoms include nausea, vomiting, and diarrhea.

Also called stomach flu.





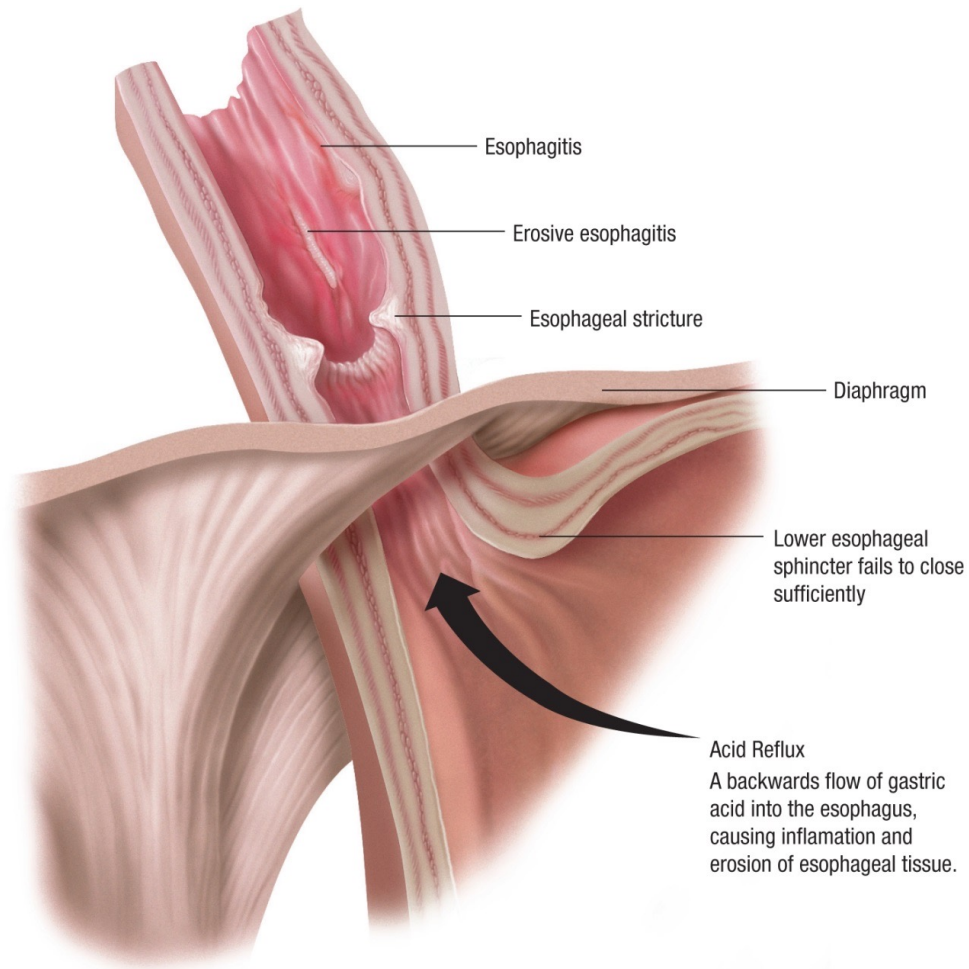
# Disorders of the Upper Gastrointestinal Tract

**Gastroesophageal reflux disease (AKA: GERD)** Chronic splashing of acidic stomach secretions into the unprotected esophagus, causing a bitter taste, gas, indigestion, bloating and chest pain. May also involve trouble swallowing, coughing, wheezing, and coughing up blood.



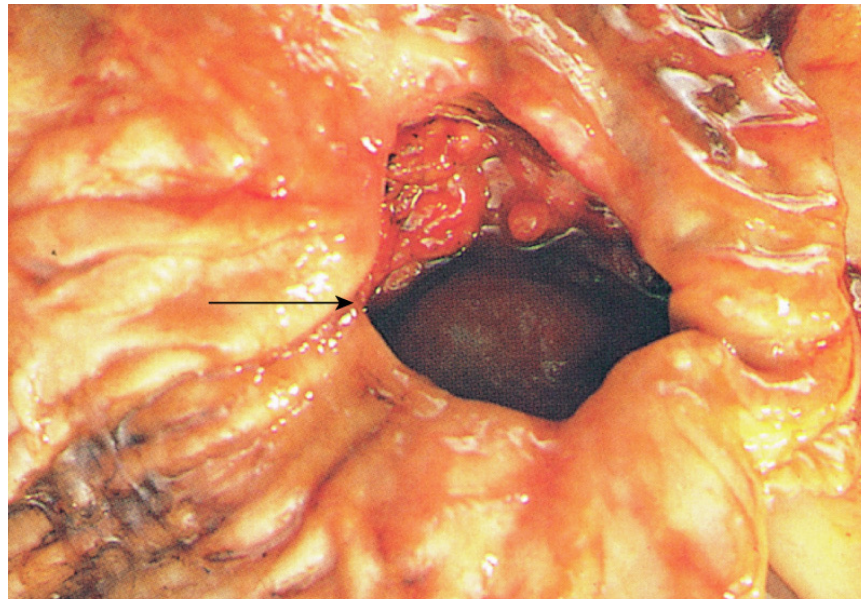
# GERD

## Gastroesophageal Reflux Disease

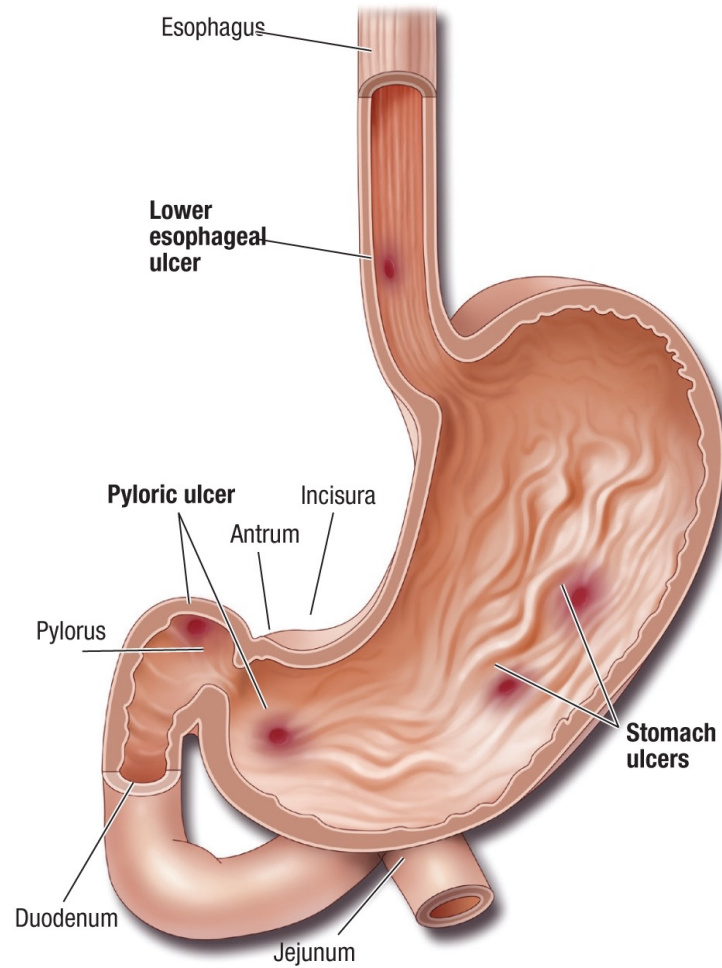


# Disorders of the Upper Gastrointestinal Tract

**Peptic ulcer** Sores of the inner surfaces of the esophagus, stomach, or duodenum that do not heal normally and remain open and vulnerable to infection. Primary symptom is gnawing burning pain in the chest or abdomen.



# Peptic Ulcer





# Response Moment

**What are 4 disorders of the Upper G.I. Tract?**

1.

2.

3.

4.



# Response Moment

**What are 4 disorders of the Upper G.I. Tract?**

1. Celiac disease
2. Gastroenteritis
3. Gastroesophageal reflux disease, AKA: GERD
4. Peptic ulcer



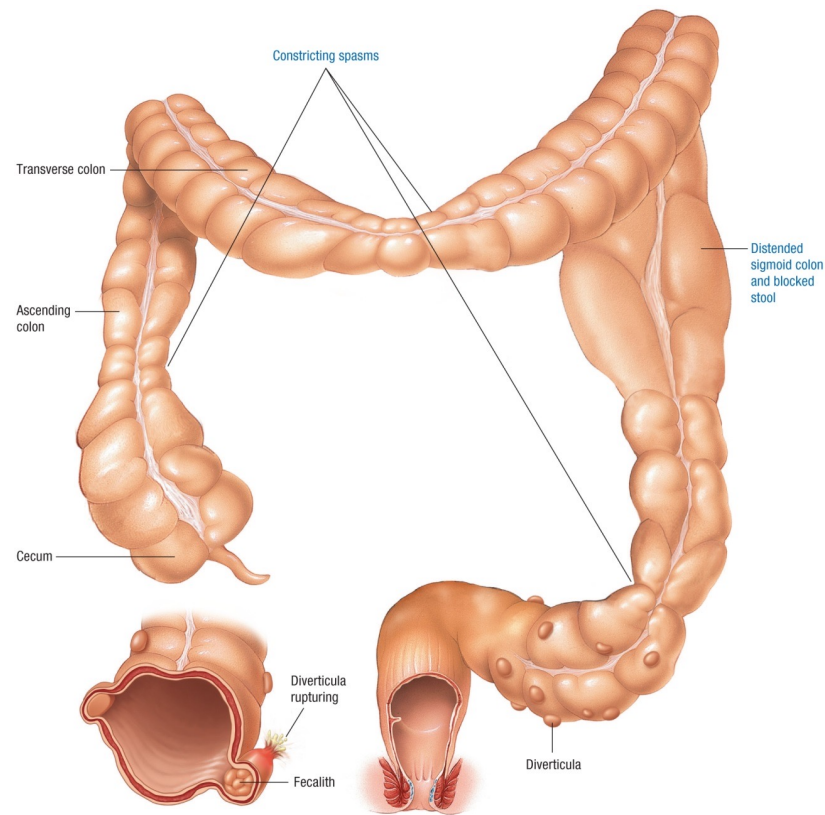
# Disorders of the Large Intestines

Diverticular disease

Irritable bowel syndrome

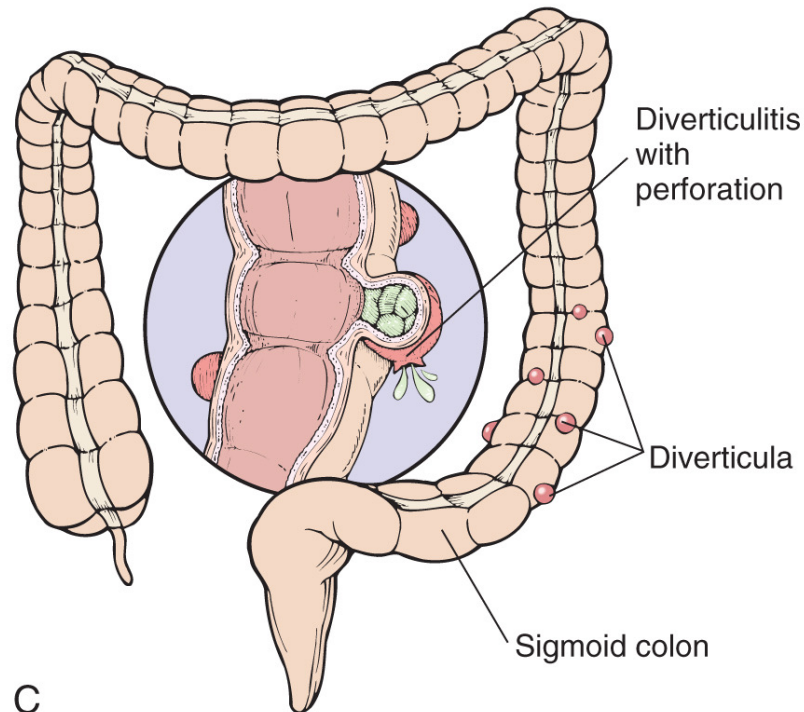
# Disorders of the Large Intestines

**Diverticular disease** Combination of diverticulosis and diverticulitis.



# Disorders of the Large Intestines

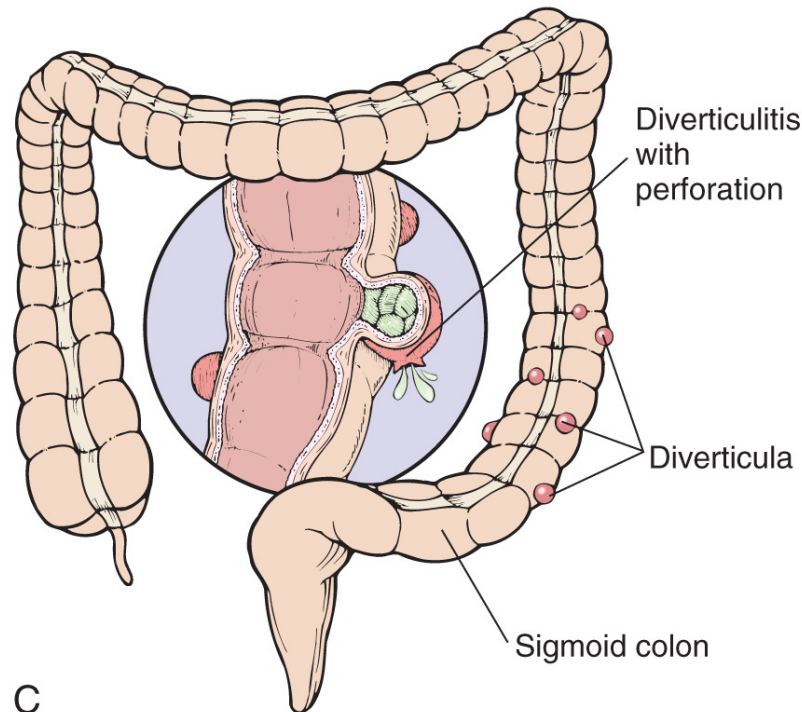
**Diverticulosis** Development of small pouches that protrude from the colon or small intestine. May be asymptomatic.





# Disorders of the Large Intestines

**Diverticulitis** Inflammation that develops when diverticulosis pouches become infected. Symptoms include bloating, nausea, fever, cramping, and severe pain.



# Disorders of the Large Intestines

**Irritable bowel syndrome (AKA: IBS)** Collection of signs and symptoms that indicate a problem with colon function, and are aggravated by stress and diet. Symptoms, which range from occasionally inconvenient to severely debilitating, include recurrent abdominal pain, pain with defecation, changes in stool frequency or appearance, gas, bloating, headaches and general malaise.





# Response Moment

**What are 2 disorders of the large intestines?**

1.

2.



# Response Moment

**What are 2 disorders of the large intestines?**

1. Diverticular disease
2. Irritable bowel syndrome, AKA: IBS



# Disorders of the Accessory Organs

Cirrhosis

Gallstones

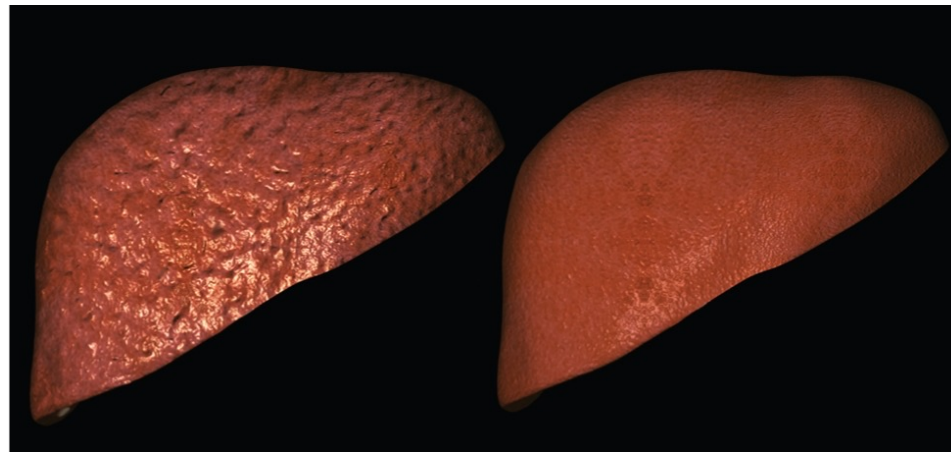
Hepatitis

Pancreatitis

Candidiasis

## Disorders of the Accessory Organs

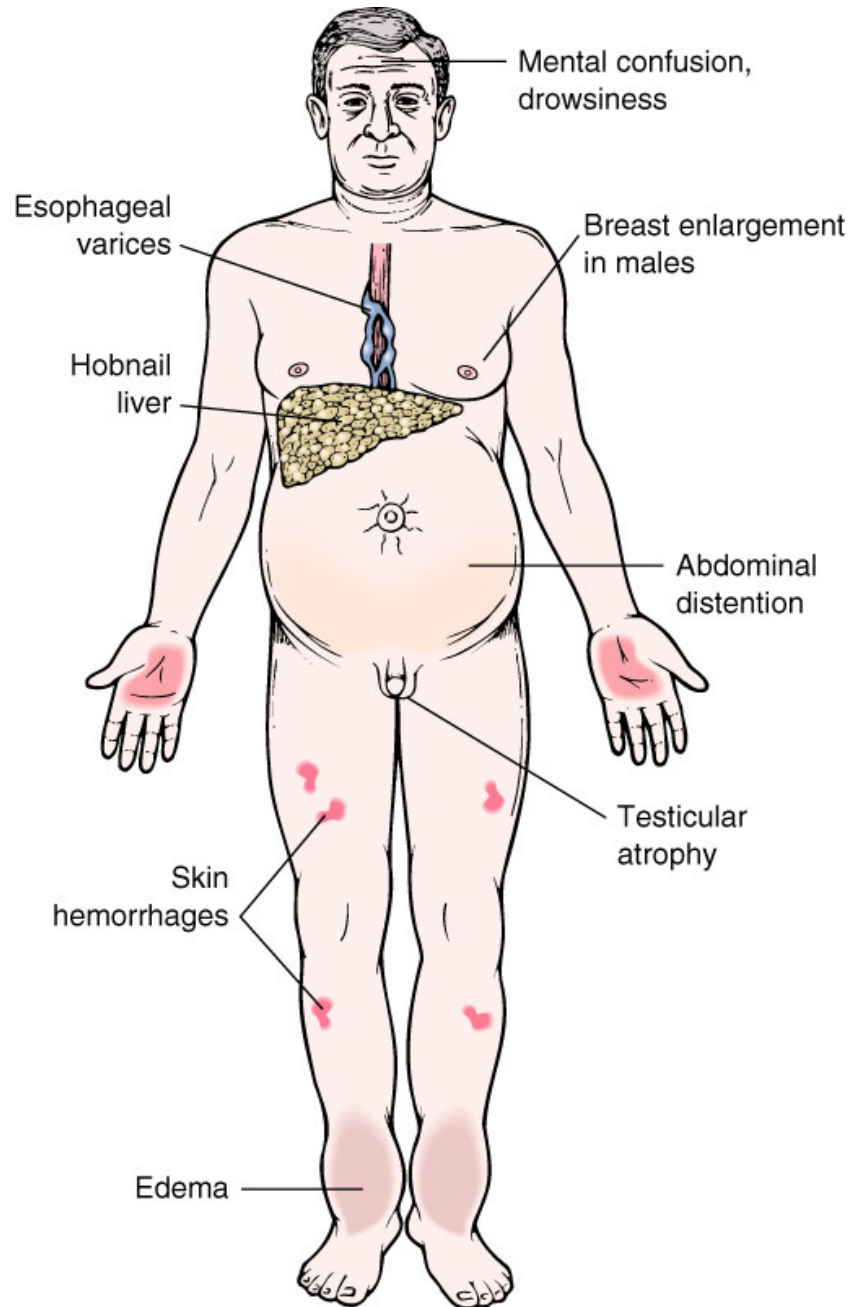
**Cirrhosis** Disorganization and dysfunction of liver cells that results in many of them being replaced or crowded out by scar tissue. Often the final stage of acute or chronic liver disease. Early symptoms may include nausea, vomiting and weight loss.



Cirrhotic liver

Normal liver

# Cirrhosis



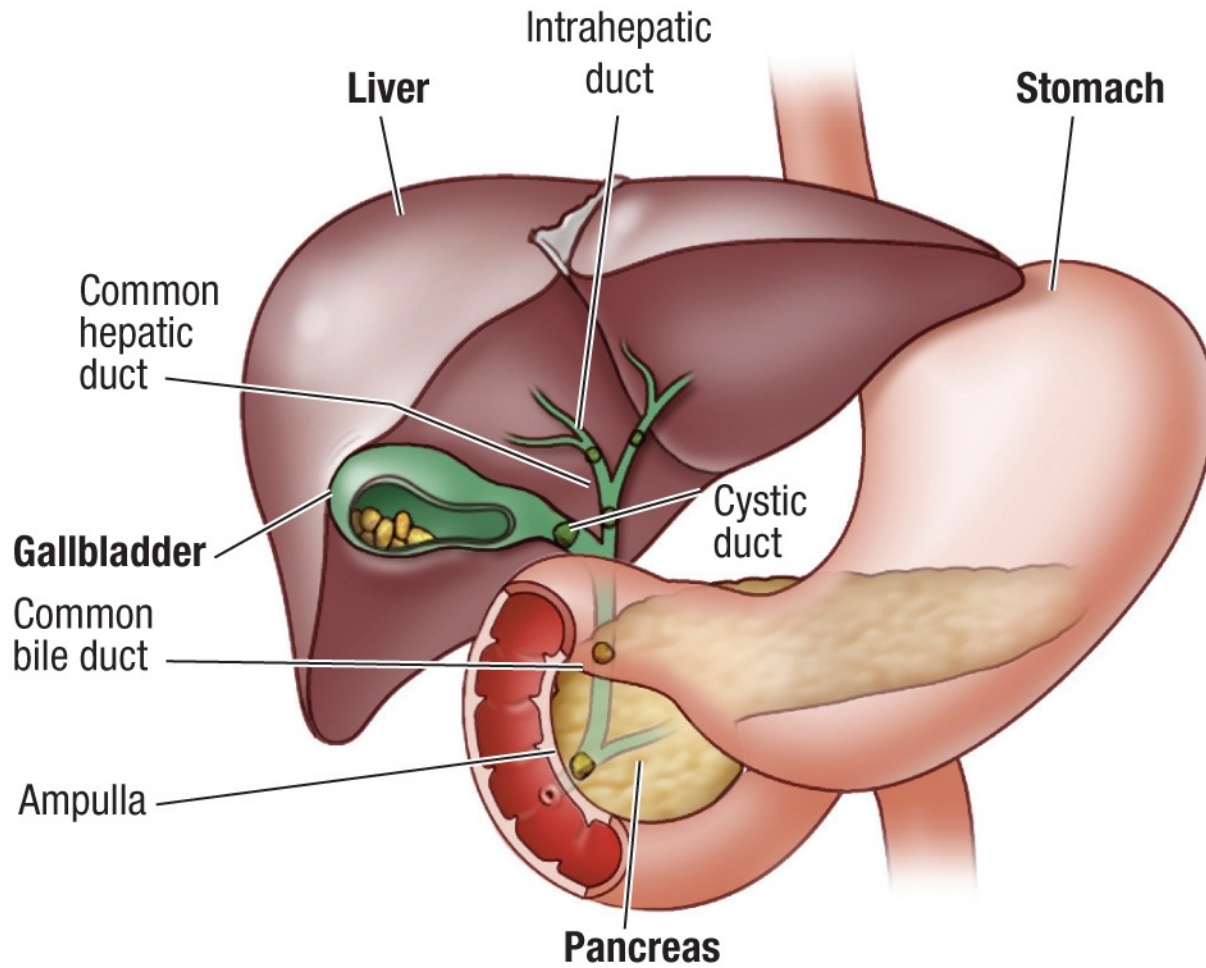
# Disorders of the Accessory Organs

**Gallstones** Crystallized formations of cholesterol or bile pigments in the gallbladder. Size ranges from as small as a grain of sand to as large as a golf ball. May be asymptomatic unless they lodge in a duct, causing acute local pain, as well as pain referred between the scapulae and over the right shoulder.

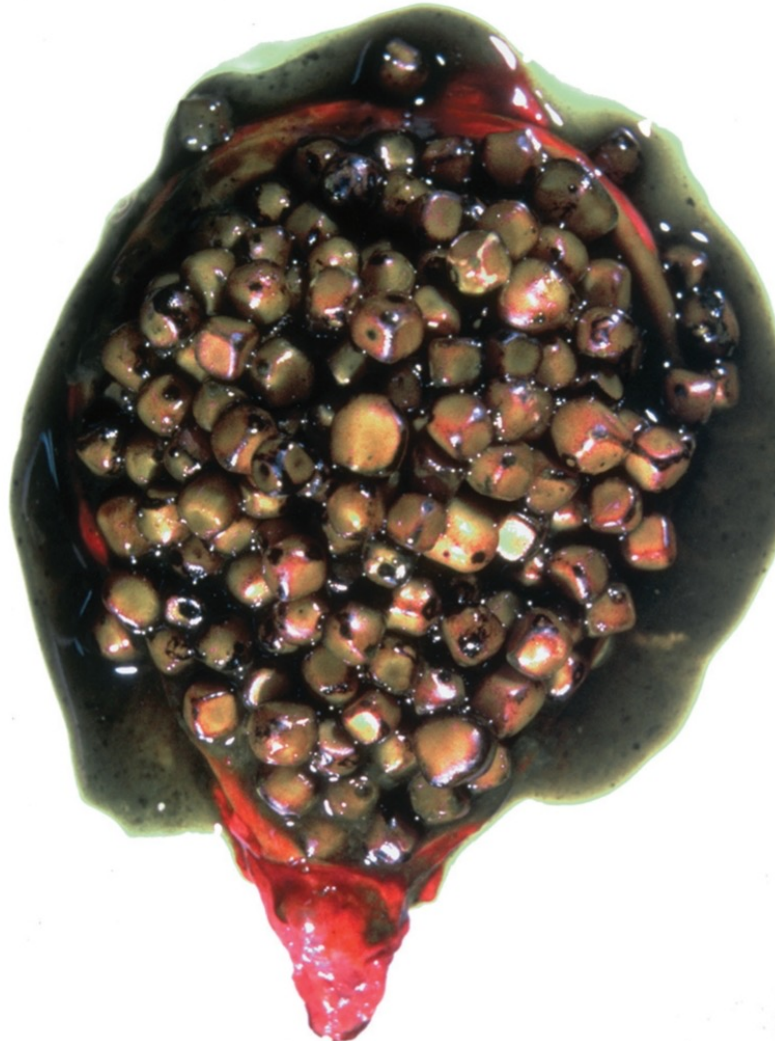




# Gallstones



# Gallstones





## Disorders of the Accessory Organs

**Hepatitis** Inflammation of the liver, usually but not always due to viral infection. Symptoms include general malaise, weakness, fever, nausea, food aversion and jaundice.

- Hepatitis A
- Hepatitis B
- Hepatitis C
- Forms **D**, **E**, **F** and **G** also exist, but are rarer than the above.



## Disorders of the Accessory Organs

**Hepatitis A** Short, acute infection of the liver that usually causes no long-lasting damage. One exposure creates lifelong immunity.

**Hepatitis B** Liver infection spread through exposure to intimate fluids such as blood, semen, breast milk, or vaginal secretions. Communicable through indirect blood-to-blood contact with a contaminated surface.

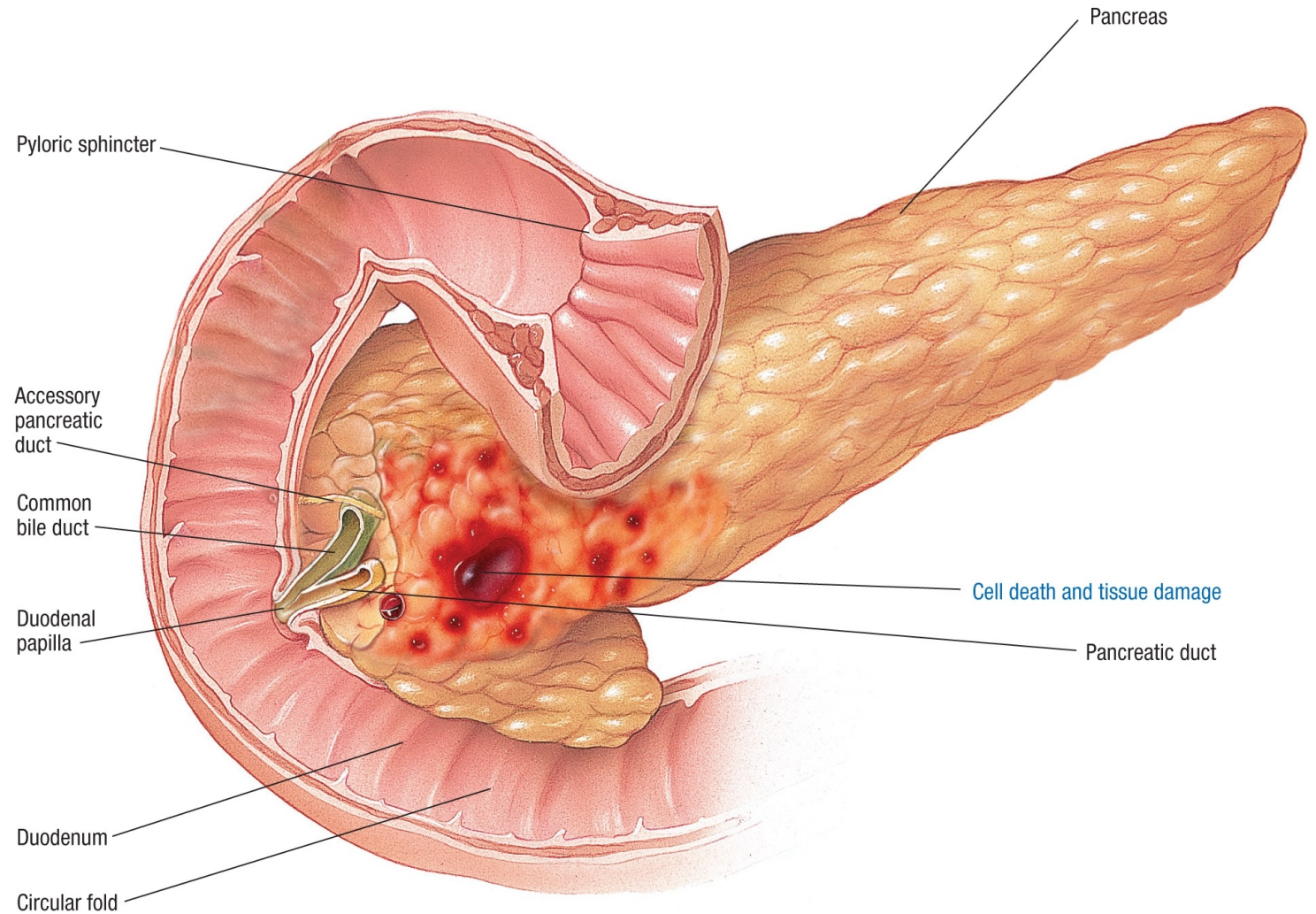
**Hepatitis C** Called a “silent epidemic”, this contagious infection damages the liver so slowly that symptoms may not develop until decades after exposure.



## Disorders of the Accessory Organs

**Pancreatitis** Inflammation of the pancreas, involving dull upper abdominal pain, which may refer to the back. Often accompanied by nausea, vomiting, fever, and rapid pulse.

# Pancreatitis





## Disorders of the Accessory Organs

**Candidiasis** Higher than normal levels of the fungus *C. albicans* in the G.I. tract resulting in the disruption of normal function of the digestive system and other systems in the body.





# Response Moment

**What are 5 disorders of the accessory organs?**

1.

2.

3.

4.

5.





# Response Moment

**What are 5 disorders of the accessory organs?**

1. Cirrhosis

2. Gallstones

3. Hepatitis

4. Pancreatitis

5. Candidiasis



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