

Gastrointestinal Pathophysiology

Laboratory Assignment #4

NAME:

Recommended reading:

1. Lecture notes on pancreatic physiology and pancreatitis

Additional optional reading:

Pages 63-77 in Gastroenterology, Saunders Text and Review Series, 1997, W. B. Saunders Co.

Fill in the blanks:

- Centroacinar and intralobular duct cells secrete _____ and _____.
- Interlobular and main duct cells secrete _____ and _____.
- Acetylcholine acts through _____ as the second messenger and stimulates secretion by the _____ cells.
- Secretin acts through _____ as the second messenger and stimulates ductal _____ secretion.
- _____ inhibits CCK and secretin release.
- Pancreatic trypsinogen is converted to trypsin in the duodenum by the action of _____.
- _____ and _____ are the two leading causes of acute pancreatitis.
- Ranson's criteria for prognosis of acute pancreatitis at admission include:
 1. Age > _____ years
 2. _____ > 200 mg/dl
 3. AST > _____ U/L
 4. WBC > _____
 5. _____ > 350 IU/L

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Case 1:

The microscopic slide GI-14 is from an emergency operation on a 52-year-old alcoholic man who presented with a precipitous drop in hematocrit, shock, and markedly elevated amylase and lipase. What is the most appropriate description for this slide?

- Acute pancreatitis
- Chronic pancreatitis
- Acute hemorrhagic pancreatitis superimposed on chronic pancreatitis
- Pancreatic adenocarcinoma

Case 2:

The microscopic slide GI-15 is from an elective operation (to relieve back pain) on a 48-year-old alcoholic man who has had bouts of steatorrhea and back pain for many years. What is the most appropriate description for this slide?

- Acute pancreatitis
- Chronic pancreatitis
- Acute hemorrhagic pancreatitis superimposed on chronic pancreatitis
- Pancreatic adenocarcinoma

Case 3:

The microscopic slide GI-16 is from a pancreatic resection in a 54-year-old man with weight loss and abdominal pain. What is the most appropriate description for this slide?

- Acute pancreatitis
- Chronic pancreatitis
- Acute hemorrhagic pancreatitis superimposed on chronic pancreatitis
- Pancreatic adenocarcinoma

Case 4:

The microscopic slide GI-17 is from a cholecystectomy specimen in a 46-year-old woman with chronic right upper quadrant pain. Are there any Rochitansky-Aschoff sinuses in this gallbladder?