

RESPIRATORY III:

1. Which is the most common causative agent for atypical pneumonia in children:
 - a. Influenza virus
 - b. *S. pneumoniae*
 - * c. *Chlamydia trachomatis*
 - d. Respiratory syncytial virus

2. A 50 year old woman presents to clinic with history of viral influenza one week ago. Other symptoms have resolved, but she continues to have progressive cough. Gram stain of sputum reveals lancet-shaped diplococci. What is the most likely causative organism(s):
 - * a. *S. pneumoniae*
 - b. *M. catarrhalis*
 - c. *E. Coli*
 - d. Mixed anaerobes

3. Which of the following clinical or pathologic features is associated with squamous cell carcinoma of the lung:
 - a. Peripherally located
 - b. defined by presence of keratinization and intercellular bridges
 - c. develops in areas of squamous metaplasia
 - * d. b and c
 - e. a and c

4. A peripheral lung tumor shows the following microscopic findings: "salt and pepper" chromatin and nuclear molding. Upon reading this in the pathology report, the clinician decides that the patient needs chemotherapy. What is the most likely diagnosis:
 - a. Adenocarcinoma
 - b. Large cell carcinoma
 - * c. Small cell carcinoma
 - d. Squamous cell carcinoma

5. A 40 year old woman has had dry cough and shortness of breath for 3 days. Chest x-ray shows diffuse, bilateral reticular infiltrates. Silver stain of sputum reveals saucer shaped organisms. Which underlying condition is most likely present:
 - a. Diabetes mellitus
 - b. COPD
 - * c. AIDS
 - d. Systemic lupus erythematosus

6. A 70 year old woman with a 40 year smoking history complains of shortness of breath for 2 weeks. She has a pleural effusion on chest x-ray. The fluid is clear with low protein content. The most likely diagnosis of her effusion is:
 - a. Metastatic breast carcinoma
 - b. Pulmonary neoplasm
 - * c. Congestive heart failure (CHF)
 - d. Pneumonia

7. With regards to paraneoplastic syndromes, which of the following statement(s) is true:
- a. Squamous cell carcinoma of the lung is *most commonly* associated with migratory thrombophlebitis (Trousseau's syndrome)
 - b. Small cell carcinoma of the lung is *most commonly* associated with PTH-like hormone and hypercalcemia
 - c. Paraneoplastic syndromes do not cause clinical symptoms
 - * d. Any tumor can produce any bioactive substance
 - e. None of the above are true

GI TRACT I:

1. The most sensitive histologic indicator of reflux esophagitis is:
- * a. Intraepithelial eosinophils
 - b. Intraepithelial lymphocytes
 - c. Intraepithelial neutrophils
 - d. Evidence of an ulcer
2. Which of the following is a risk factor for squamous cell carcinoma of the esophagus:
- a. White race
 - b. Female sex
 - * c. Achalasia
 - d. Barrett's esophagus
3. To make the diagnosis of Barrett's esophagus you must see:
- a. Endoscopic evidence of an ulcer
 - * b. Columnar metaplasia with goblet cells on histology
 - c. Mass in the esophagus
 - d. "bird's beak" on barium swallow
4. Esophageal varices:
- a. Can cause massive hemorrhage
 - b. Are secondary to cirrhosis and portal hypertension
 - c. Result from engorgement of portal-caval communicating vessels
 - * d. All of the above
5. A 70 year old man takes large quantities of NSAIDs for arthritis. Recently he has had epigastric pain and blood-tinged vomiting. Physical exam is unremarkable. What is the most likely cause of his symptoms:
- a. Adenocarcinoma
 - b. Helicobacter pylori infection
 - * c. Acute gastritis
 - d. Hyperplastic polyp

6. With regards to stress ulcers, which of the following statement(s) is true:
- a. Curling's ulcers are associated with CNS injury
 - b. They are not commonly seen in the critically ill
 - c. Treating the underlying disease will resolve the ulcer
 - * d. a and c
7. Diffuse type gastric carcinoma:
- a. Arises from metaplastic epithelium
 - b. Is associated with chronic gastritis and Helicobacter pylori infection
 - c. Shows glandular differentiation
 - * d. Can invade as single malignant cells (signet ring cells)
8. Helicobacter pylori:
- a. Is a curvilinear gram positive rod
 - * b. Causes chronic gastritis through direct cell injury and production of inflammatory cytokines
 - c. Is associated with diffuse type gastric carcinoma
 - d. Shows no association with B cell gastric lymphoma

GI TRACT II:

1. A term infant fails to pass meconium and vomits all oral feedings. An abdominal ultrasound shows colonic dilation above a narrow segment in the sigmoid. A biopsy shows absence of ganglion cells in the neural plexuses. What is the most likely diagnosis?
- a. Down's syndrome
 - b. Volvulus
 - c. Intussusception
 - d. Hirschprung's disease
2. Infectious enterocolitis:
- a. Is responsible for many childhood deaths in the US
 - b. Is associated with contaminated food and water
 - c. Causes death from dehydration and metabolic alkalosis
 - d. Is not caused by toxigenic organisms
3. CT scan of the abdomen of a 65 year old woman shows multiple outpouchings of the wall of the sigmoid colon. Which of the following complications is most likely to develop in this patient:
- a. Adenocarcinoma
 - b. Bowel obstruction
 - c. Malabsorption
 - d. GI bleed and perforation

Choose the form of inflammatory bowel disease that is most characteristic for the following features:

- a. Ulcerative colitis
 - b. Crohn's disease
4. pseudopolyps
 5. involves the GI tract from mouth to anus
 6. transmural inflammation and non-necrotizing granulomas
 7. can show "rectal sparing"
 8. is treated surgically
9. With regards to colorectal carcinoma, which of the following statement(s) is true:
 - a. Left sided tumors often present with anemia and few other symptoms
 - b. Colorectal carcinoma can often arise from hyperplastic polyps
 - c. Development of colorectal carcinoma is associated with loss of the APC gene
 - d. The majority of colorectal carcinomas show no glandular differentiation

GALLBLADDER AND PANCREAS:

1. Chronic pancreatitis is characterized by:
 - a. Reversible injury
 - b. Calcifications and sparing of acini
 - c. Fibrous replacement of pancreatic tissue
 - d. b and c
2. Acute pancreatitis most often results from:
 - a. Alcohol use and gallstones
 - b. Trauma
 - c. Drugs
 - d. Infection
3. A 65 year old woman presents to her doctor complaining of gnawing pain radiating to her back and a sense of epigastric fullness. A CT scan showed a mass in the head of the pancreas. The woman wants to know what this might mean. What should the doctor tell her:
 - a. 5 year survival is 15% without surgery, but 70% with resection
 - b. She shouldn't worry since the mass is probably benign
 - c. Her symptoms are not characteristic of pancreatic cancer
 - d. Surgical resection is recommended but has no affect on long term survival
4. With regard to cholelithiasis, which of the following statement(s) is true:
 - a. Is caused by gallstones in the biliary tree
 - b. The majority of gallstones in the US are pigment stones
 - c. Pigment stones can be seen in patients with intravascular hemolysis
 - d. Risk factors include male sex, obesity and age >40

5. What is the most common cause of liver failure in infants:
 - a. Meckel's diverticulum
 - b. Biliary atresia
 - c. Hirschprung's disease
 - d. Choledocholithiasis and ascending cholangitis

6. Carcinoma of the bladder:
 - a. Is more common in women
 - b. Is very rare with a poor 5 year survival rate
 - c. Is widely disseminated at the time of diagnosis
 - d. Presents with few symptoms
 - e. All the above