

Temple University School of Medicine
Department of Pathology and Laboratory Medicine
Pathology (D305) Examination III Version 2
November 12, 2009

IMPORTANT: Read the following instructions.

1. Write examination version number in the space of section number on the examination answer sheet.
2. Fill in your name and the last four digits of your Temple identification number on your answer sheet and darken the corresponding circles with a #2 pencil.
3. There are eighty (80) items (questions) on this examination. There is only one answer to each item. Choose the best correct answer to a question or response to finish the statement of each item.
4. Use a #2 pencil to mark your answers on your answer sheet. Mark your answer right after you chose one. There is no extra time at the end of the examination. The examination time is one hour and 40 minutes.
5. Keep your eyes on your own examination paper and answer sheet. Place your own examination paper and answer sheet on your table top and prevent them from being exposed to others.
6. Students are not allowed to bring electronic devices including cell phones or other miscellaneous items to the examination.
7. Proctors are not allowed to explain questions during examination.

CORRECTED except

#69 → NOT SURE OF
ANSWER.

2008 - infant
v8 packed
missing even

~~2009 - on hand~~

1. A 70-year-old man has sudden onset of severe substernal chest pain that radiates to his left arm and jaw. In the emergency room, angiography reveals complete thrombosis of the left circumflex coronary artery. Which of the following complications of this disease is most likely to happen within 1 hour of these events?

Angina

- C
- A. Cardiac tamponade fluid
 - B. Rupture of papillary muscles.
 - ☒ C. Ventricular fibrillation
 - D. Ventricular aneurysm.
 - E. Restrictive cardiomyopathy

2. Coronary artery vasospasm is believed to play a large role in:

- B
- A. stable angina pectoris.
 - ☒ B. Prinzmetal's angina.
 - C. mitral valve prolapse.
 - D. acute rheumatic pericarditis.
 - E. subacute bacterial endocarditis.

3. Which of the following infectious agents is a common cause of myocarditis in the US?

- E
- A. *Plasmodium falciparum* Malaria
 - B. Herpes simplex virus, type I
 - C. Epstein-Barr virus EB ✓
 - D. *Mycobacterium tuberculosis*
 - ☒ E. Coxsackieviruses A and B

4. Cardiac vegetations:

- C
- A. are aggregates of fibrin clot on the pericardium caused by acute rheumatic fever.
 - B. are small myocardial tumors that protrude into the left atrium.
 - ☒ C. are small fibrin clots on inflamed, damaged surfaces of valves.
 - D. are zones of inflammation in the myocardium induced by viral infections.
 - E. are caused exclusively by *Streptococcus viridans*.

5. A 52-year-old woman has a long history of chronic alcoholism and has begun experiencing heart problems associated with arrhythmias and systolic dysfunction. Imaging studies reveal that all chambers of her heart are enlarged. What is the most likely diagnosis for her heart condition?

emphysema obstructive disorder

- B
- A. Mitral stenosis
 - ☒ B. Dilated cardiomyopathy ✓
 - ~~C. Restrictive cardiomyopathy~~
 - ~~D. Pericardial effusion~~
 - ~~E. Hypertensive heart disease~~

6. A 59-year-old man has a history of unstable angina pectoris. On his way to work one morning he collapses and dies on the sidewalk. The underlying cause for his sudden cardiac death is most likely:

D

- A. calcific aortic stenosis.
- B. mitral valve stenosis due to rheumatic heart disease.
- C. right atrial dilation due to tricuspid valve insufficiency.
- ☒ D. ventricular fibrillation secondary to ischemia of heart tissue. ✓
- E. chronic obstructive pulmonary disease. COPD

7. Which of the following typically causes elevated serum levels of cardiac troponins?

A

- ☒ A. A myocardial infarct
- B. Left atrial arrhythmia
- C. Dilated cardiomyopathy
- D. Mitral valve prolapse
- E. Hypertensive heart disease

8. A 63-year-old woman has been diagnosed as having right-sided heart failure. A common manifestation of this type of failure is:

D

- ~~A. calcific aortic stenosis.~~
- ~~B. a prolapsed mitral valve.~~
- ~~C. a ventricular septal defect.~~
- ☒ D. portal hypertension.
- ~~E. an aortic coarctation.~~

9. A 69-year-old man has a recent history of myocardial infarction and has survived. However, left ventricular output has diminished and has resulted in hypoperfusion of the kidney. The response of the kidney results in:

A

under perfusion

- ☒ A. salt retention and corresponding increase in fluid volume.
- B. diuresis in order to decrease fluid volume.
- ☒ C. production of renin to cause generalized vasodilation in the body. *Renin/Ang.*
- D. increased production of vitamin D.
- E. a rapid increase in the rate of development of atherosclerosis of the aorta.

10. A 57-year-old woman presents to the dental clinic for routine dental care. During the review of history and initial examination you notice that the patient has swollen ankles and distended neck veins. She also has trouble breathing and feels she cannot breathe at all if the dental chair is reclined more than 45 degrees. With these signs and symptoms you feel she most likely has:

- C
- A. pure right-sided heart failure.
 - B. pure left-sided heart failure.
 - ☒ C. biventricular heart failure.
 - D. mitral valve prolapse.
 - E. a ventricular septal defect.

pure edema (1) 0 Fail
swollen (2) 0 Fail
ankles

11. The degree of shunting that occurs in the tetralogy of Fallot is governed mostly by:

- B
- A. the size of the atrial septal defect present.
 - ☒ B. the degree of obstruction affecting the pulmonary artery.
 - C. the size of the left atrium.
 - D. the presence or absence of a patent ductus arteriosus.
 - E. the thickness of the right ventricular muscle.

R → L
Shunt

12. With regard to congenital left to right shunts of the heart:

R ← L

- D
- ☒ A. the patent ductus arteriosus is by far the most common cause. VSD most common
 - B. patients are typically born cyanotic. R → L
 - C. tetralogy of Fallot is the most common cause. R → L
 - ☒ D. patients become cyanotic with time due to a reversal of the shunt.
 - E. pulmonary blood pressure drops to dangerously low levels.

13. A 63-year-old man has episodes of severe substernal pain with exercise that have become more frequent and more painful over the past 9 months. Nitroglycerin relieves the pain. Which of the following cardiac lesions is most likely to be present?

- E
- A. Rheumatic mitral stenosis.
 - ☒ B. Acute myocardial infarct
 - C. Viral myocarditis
 - D. Dilated cardiomyopathy
 - ☒ E. Severe atherosclerosis of the coronary arteries

not MI

14. Foci of inflammation in acute rheumatic myocarditis are called:

- B
- A. vegetations.
 - ☒ B. Aschoff bodies.
 - C. Anitschow cells.
 - D. ferruginous bodies.
 - E. abscesses with draining fistulous tracts.

15. A 67-year-old man developed gradually worsening heart failure over the past 3 years with pitting edema of the legs. He dies of respiratory failure and at autopsy his cardiac findings are limited to the right side of the heart: there is right ventricular and atrial hypertrophy and dilation. Which of the following conditions is most likely to have produced the cardiac changes?

A. Chronic obstructive pulmonary disease COPD
B. Saddle pulmonary thromboembolism
C. Atherosclerosis of the left anterior descending coronary artery
D. Calcific aortic stenosis
E. Cardiac tamponade → fluid accumulation

Ⓟ Failure

16. A 31-year-old woman has a history of autoimmunity that includes atrophic gastritis with destruction of parietal cells. Which of the following anemias would she likely also have?

A. Sickle cell anemia
B. Spherocytosis
C. Thalassemia minor
D. Myelophthestic anemia
E. Pernicious anemia

asymptomatic
Bcha
bone
megaloblastic

17. A 33-year-old male has a history of glucose-6-phosphate dehydrogenase deficiency. Several drugs given recently to combat an infection resulted in acute anemia and hemoglobinemia. The most likely cause of the anemia is:

A. lack of synthesis of red blood cells in the bone marrow.
B. hemolysis due to oxidant injury.
C. a type II hypersensitivity reaction.
D. removal of red blood cells by macrophages in the spleen due to altered shape.
E. a type III hypersensitivity reaction.

18. Spherocytosis:

A. is due to an inherited mutation in the hemoglobin alpha chain gene.
B. results in autosplenectomy.
C. typically causes death of the patient before 10 years of age.
D. is cured following splenectomy.
E. is most often due to a mutation in the ankyrin gene.

19. Iron deficiency anemia typically results in:

- A. a normochromic, normocytic anemia.
- B. a normochromic, microcytic anemia.
- C. a hypochromic, microcytic anemia. ✓
- D. a hypochromic, macrocytic anemia.
- E. a hyperchromic, macrocytic anemia.

20. Greater than normal numbers of circulating eosinophils are typically observed in:

- A. viral infections.
- B. patients with allergic reactions. ✓
- C. patients with acute periapical abscesses.
- D. tuberculosis.
- E. emphysema.

allergic rxn

21. A 13-year-old boy has a history of repeated transfusions in order to overcome a profound anemia. He is developing hemochromatosis. When the disease was first diagnosed in infancy, he demonstrated a "hair-on-end" appearance on lateral skull radiographs. Which of the following is the most likely molecular defect in this patient?

- A. An inability to maintain glutathione levels in red blood cells.
- B. An inability to absorb vitamin B12 from the GI tract.
- C. A deficiency of von Willebrand factor.
- D. A lack of synthesis of the hemoglobin beta chains. ✓
- E. A lack of synthesis of all 4 of the hemoglobin alpha chains.

Fe build up

crew cut

22. Which of the following types of anemia is typically associated with minimal bone marrow hyperplasia?

- A. Iron deficiency anemia. ✓
- B. Sickle cell anemia
- C. Thalassemia major
- D. Severe immune-mediated hemolytic anemia
- E. HbH disease

23. A 25-year-old woman had run across a playground after her small child when she developed multiple points of pain in her legs and chest. A recent imaging study indicated that her spleen was much reduced in size. Which of the following best describes her disease?

- A. She has a t(14:18) translocation. Follicular
- B. There is markedly diminished synthesis of all her hemoglobin alpha chains.
- C. There is a specific point mutation at the 6th position of both hemoglobin beta chains. ✓
- D. There is a specific point mutation at the 6th position of one hemoglobin beta chain.
- E. There is markedly diminished synthesis of glucose-6-phosphate dehydrogenase.

sickle cell anemia

oxidants

24. A 27-year-old woman has anemia and a demyelinating disease of her peripheral nerves. She most likely has:

- B
- A. thalassemia minor.
 - ☒ B. a deficiency in vitamin B12. ✓
 - C. anemia of chronic disease.
 - D. a hypochromic, microcytic anemia.
 - E. polycythemia vera

25. A 63-year-old man has been diagnosed with a ^{CML} chronic leukemia in which the myeloid stem cells are producing large numbers of neutrophils, eosinophils and immature myelocytes. What chromosomal translocation is characteristic of this type of leukemia?

- A
- ☒ A. t(9;22) CML
 - B. t(14;18)
 - C. t(5;19)
 - D. t(7;9)
 - E. t(3;21)

26. Which of the following is an important cause of disseminated intravascular coagulation? DIC

- E
- A. Polycythemia vera
 - B. A deficiency of von Willebrand factor
 - C. Thalassemia major
 - D. Saddle embolus
 - ☒ E. Post-partum obstetric complications

27. Which of the following diseases is characterized by normal PT and PTT, normal platelet numbers and normal bleeding time?

- A
- ☒ A. Deficiency of vitamin C
 - B. Hemophilia B ✗
 - C. Deficiency of von Willebrand factor ✗
 - D. Autoimmune thrombocytopenia ✗
 - E. Deficiency of factor VII ✗

28. A 61-year-old woman has been diagnosed with subacute bacterial endocarditis. Which of the following statements is most correct regarding her disease? SBE

- C
- A. Her heart was normal prior to the infection.
 - B. The infection is due to Staphylococcus aureus.
 - ☒ C. She had abnormal cardiac valves prior to the infection.
 - D. She is most likely an intravenous drug abuser.
 - E. She is experiencing high fever associated with myocardial abscesses.
- viridians group
strep

29. A 56-year-old man has been diagnosed with Bence-Jones protein and has round, punched-out radiolucencies in his calvarium on lateral skull radiographs. Your diagnosis is:

- D**
- A. acute myelogenous leukemia. *AML*
 - B. Burkitt lymphoma.
 - C. diffuse large B cell lymphoma.
 - D. multiple myeloma.**
 - E. chronic myelogenous leukemia.

30. A 10-year-old boy in Ghana presents with an enlarging maxillary mass. A biopsy reveals a "starry sky" microscopic pattern. What virus is likely associated with this mass?

- B**
- ~~A. Human papilloma virus HPV~~
 - B. Epstein-Barr virus EBV → B cell → Plasma cell**
 - ~~C. Varicella zoster virus~~
 - ~~D. Coxsackievirus A~~
 - ~~E. Cytomegalovirus~~

31. A 49-year-old woman has developed several enlarged cervical lymph nodes bilaterally. Imaging studies reveal the disease process is widely spread, confined to lymph nodes, and there is bone marrow involvement. A leukemic component is absent. A biopsy of one of the lymph nodes reveals clonal proliferation of B cells forming irregular follicles. Which of the following statements best describes this disease?

- widely spread*
continued
C *to lymph nodes*
Bone marrow
- A. Chemotherapy will result in complete remission.
 - B. The disease is best treated by removing individual lymph nodes as they enlarge. *Follicular*
 - C. The cells typically have a translocation causing increased expression of the bcl-2 gene.**
 - D. Herpes simplex virus plays an important role in the pathogenesis of the disease. *apoptosis gene*
 - E. Gingival enlargement is very characteristic of this disease.

32. The diagnostic feature of Hodgkin lymphoma is:

- B**
- A. Birbeck granules.
 - B. Reed-Sternberg cells.**
 - C. amyloid deposition.
 - D. night sweats.
 - E. a translocation involving the MYC gene.

33. Prothrombin time (PT): *Pet extrinsic 5, 7, 10 prothrombin fibrinogen*

- B*
- A. is prolonged when there is a deficiency in factor IX. *9*
 - ☒ B. is a laboratory measure of the effectiveness of the extrinsic and common pathways of coagulation.
 - C. is prolonged in diseases that cause increased vascular wall fragility.
 - D. is a laboratory measure of the effectiveness of platelets.
 - E. is normal when there is a deficiency in prothrombin.

34. A deficiency in von Willebrand factor can lead to: *8 clotting factor*

- E*
- ☒ A. decreased numbers of circulating platelets.
 - B. spherocytosis.
 - C. a macrocytic, hyperchromic anemia.
 - DIC*
☒ D. disseminated intravascular coagulation.
 - ☒ E. a prolonged bleeding time.

35. Reticulocytosis:

- D*
- A. is an increase in circulating white blood cells observed in infectious mononucleosis.
 - B. is an inherited defect in the cytoskeleton of red blood cells.
 - C. is an inherited disease of platelets that prevents proper aggregation.
 - ☒ D. is an increase in immature red blood cells in the circulation.
 - E. is an increase in macrophages in the spleen caused by altered red blood cell shape.

36. A 50-year-old man has developed dyspnea *emphysema* and a barrel chest with difficulty exhaling. He has been a long-time smoker. Imaging studies reveal large bullous cavities in the lung. Extensive destruction of which component in the lung is responsible for these findings?

- A*
- ☒ A. Elastin ✓
 - B. Collagen
 - C. Hyaluronic acid
 - D. Surfactant
 - E. Fibronectin

37. A 58-year-old woman has developed cor pulmonale, with attendant pulmonary hypertension. She has hypoxemia. Radiographs reveal multiple small radiopacities in the lung lobes and a biopsy reveals extensive granulomatous inflammation. This woman is most likely suffering from:

- E
- A. microatelectasis.
 - B. pneumococcal pneumonia.
 - C. colon adenocarcinoma metastatic to the lung.
 - D. panacinar emphysema.
 - E) restrictive lung disease.
- sarcoidosis*

38. A 49-year-old woman presented to her dentist for evaluation of an ulcerative mass in the right posterior maxillary vestibule. Her teeth tested vital and there was little evidence of periodontal disease. She was sent to the oral surgeon for biopsy. The biopsy diagnosis was metastatic neoplasm of lung. She is a non-smoker. The primary cancer was relatively small and situated at the periphery of the lung. What type of lung cancer does she most likely have?

- C
- A. Well-differentiated squamous cell carcinoma of the lung
 - B. Fibrosarcoma
 - C) Adenocarcinoma of lung *non-smoker*
 - D. Small cell carcinoma of lung *endocrine*
 - E. Undifferentiated, large cell carcinoma of the lung.

39. A 57-year-old man has been a long-time smoker and has recently developed hoarseness and slight cough and discomfort in his neck. Examination of his vocal cords reveals an ulcerated, fungating mass. A biopsy confirms cancer. What type of cancer is most common in this location?

- A
- A) Squamous cell carcinoma ✓
 - B. Adenocarcinoma
 - C. Small-cell carcinoma ✓ *smoking*
 - D. Fibrosarcoma
 - E. Chondrosarcoma
- endocrine*

40. Which type of bronchogenic carcinoma is best treated with chemotherapy?

- C
- A. Bronchial carcinoma-in-situ
 - B. Undifferentiated, large-cell carcinoma
 - C) Small-cell carcinoma
 - D. Adenocarcinoma
 - E. Squamous cell carcinoma

41. Which of the following cancers has a strong association with Epstein-Barr virus? EBV

- B
- A. Bronchogenic squamous cell carcinoma
 - ☒ B. Nasopharyngeal carcinoma ✓ + Burkitt's lymphoma
 - C. Laryngeal carcinoma
 - D. Adenocarcinoma of the lung
 - E. Large-cell carcinoma of the lung

42. A 36-year-old woman has a recent history of bronchopneumonia UR tract. She began to feel better after 3 days of antibiotic therapy and stopped taking them. She recently developed pleuritic pain. Imaging studies revealed a fluid containing space in the lung and pneumothorax. A biopsy revealed empyema. She is most likely suffering from:

- E
- ☒ A. an atypical form of pneumonia caused by mycoplasma.
 - B. metastatic carcinoma to the lung.
 - C. malignant mesothelioma.
 - D. centriacinar emphysema.
 - ☒ E. lung abscess.

43. A 65-year-old woman has been a heavy smoker for many years. She has developed pronounced emphysema. An emphysematous space at the periphery of the lung has ruptured causing inspired air to get into the pleural space. Which of the following is the most likely event to follow?

- D
- A. Sarcoidosis
 - B. Lung abscess
 - C. Fibrinous pericarditis
 - ☒ D. Compression atelectasis ✓ collapsed lung
 - E. Mesothelioma

44. Which of the following lung diseases is irreversible?

- D
- A. Asthma
 - B. Compression atelectasis
 - C. Microatelectasis
 - ☒ D. Contraction atelectasis ✓
 - E. Pleuritis

45. Atypical pneumonia:

- B
- ☒ A. is caused by sarcoidosis.
 - ☒ B. is usually caused by viruses or mycoplasma. ✓
 - ☒ C. is due to aspirating gastric contents.
 - ☒ D. is due to Streptococcus pneumoniae infection.
 - ☒ E. is usually limited to involving one entire lobe of the lung.

46. Which of the following inflammatory mediators is believed to be the principal mediator of the late stage of extrinsic asthma?

- C
- A. Histamine
 - B. Prostaglandins
 - ☒ C. Leukotrienes
 - D. Platelet activating factor
 - E. Bradykinin

47. A 51-year-old woman has a history of immunologically-based disease. During drug treatment of a bad case of pneumococcal pneumonia she suddenly develops acute dyspnea and hypoxemia with signs of respiratory failure. She is diagnosed with acute respiratory distress syndrome. What would a biopsy of her lung likely show?

- D
- A. Sarcoidosis
 - B. Panacinar emphysema
 - C. Fibrosis and scarring
 - ☒ D. Hyaline membranes
 - E. Chronic inflammation adjacent to alveolar spaces
- ARDS

48. Which of the following is a major cause of chronic obstructive lung disease?

- E
- A. Berylliosis
 - B. Sarcoidosis *restrictive*
 - C. Diffuse interstitial fibrosis of the lung
 - D. Radiation therapy
 - ☒ E. Smoking

49. A 69-year-old man develops dyspnea and presents with a Virchow node. He most likely has:

- D
- A. extrinsic asthma.
 - B. pneumothorax.
 - C. malignant mesothelioma:
 - ☒ D. metastatic bronchogenic carcinoma. ✓
 - E. chronic bronchitis.
- Bronchogenic Carcinoma

50. A 61-year-old man has a long history of smoking. For the past few years he has developed a productive cough. He has battled lung infections during the past year. Studies reveal he has developed cor pulmonale and that the lining of his bronchi and bronchioles has increased numbers of mucous glands and goblet cells. Which of the following diseases does he most likely have?

- C
- A. Repetitive attacks of acute asthma
 - B. Adenocarcinoma of the lung
 - ☒ C. Chronic bronchitis ✓
 - D. Empyema
 - E. Systemic hypertension

51. Laboratory blood tests of a patient who has typhoid fever most likely show which of the following?

- E
- ~~A. Thrombocytosis~~ ↓ platelets
 - ~~B. Eosinophilia~~ immune response
 - ~~C. Leukemias~~ allergy
 - ~~D. Polycythemia~~ ↑ wbc's
 - ☒ E. Leukopenia ↓ wbc's
- infection

52. Laboratory tests of a patient who has acute appendicitis most likely show which of the following results?

- D
- A. Hyperamylasemia
 - B. Hypernatremia
 - C. Increased serum carcinoembryonic antigen
 - ☒ D. Leukocytosis ↓ wbc's
 - ☒ E. Increased serum alkaline phosphatase

53. Gene analysis of a patient who has numerous adenomatous polyps of the colon shows mutation of the APC gene. What is the most likely finding in the oral region?

- C
- A. Multiple neurofibromas in the oral mucosa
 - B. Recurrent aphthous ulcers
 - ☒ C. Multiple osteomas in the mandible
 - D. Enlargement of the submandibular gland
 - E. Xerostomia with movable teeth

54. Microscopic examination of an ulcerated polyp at the colo-rectal junction shows irregular proliferation of epithelial tissue forming strands and islands with keratin pearls. What is the most likely diagnosis?

- A
- ☒ A. Squamous cell carcinoma
 - ☐ B. Ulcerative colitis
 - ☐ C. Crohn disease
 - ☐ D. Diverticular disease
 - ☐ E. Hemorrhoids

55. What is the most common cause for esophageal varices to develop?

- B
- ☒ A. Pulmonary hypertension
 - ☒ B. Alcoholic cirrhosis
 - ☐ C. Heavy cigarette smoking
 - ☐ D. Voice abuse
 - ☐ E. High fiber diet

56. Patients who have which of the following conditions most likely reveal pernicious anemia?

- B
- ☐ A. Acute erosive gastritis
 - ☒ B. Chronic autoimmune gastritis
 - ☐ C. Bacillary dysentery
 - ☐ D. Peptic ulcer
 - ☐ E. Stress ulcer
- megaloerythrocytic
DNA

57. A 35-year-old man has had epigastric pain for over 1 year. The pain is relieved if he takes antacids or eats more food. The result of a urea breath test is positive. What is the most likely pathologic condition this man has?

- E
- ☐ A. Esophageal achalasia
 - ☒ B. Acute erosive gastritis
 - ☐ C. Celiac disease
 - ☐ D. Viral gastroenteritis
 - ☐ E. Peptic ulcer

58. Which microorganism is the causative factor for chronic bacterial gastritis that subsequently is a major risk factor for the development of adenocarcinoma of the stomach?

- D
- ☐ A. Toxigenic E. coli
 - ☐ B. Adenovirus
 - ☐ C. Staphylococcus aureus
 - ☒ D. Helicobacter pylori
 - ☐ E. Shigella flexneri

59. A patient who has peptic ulcer is most likely to develop which of the following complications?

- A. Hematemesis vomit blood
B. Fat malabsorption intestine
C. Hepatic metastasis
D. Paraneoplastic syndrome
E. Vitamin B12 deficiency

60. A woman experiences severe diarrhea whenever she eats bread or muffin. What is the most likely pathologic condition she has?

- A. Acute erosive gastritis
B. Chronic autoimmune gastritis
C. Celiac disease Gluten
D. Ulcerative colitis
E. Viral gastroenteritis

61. Chronic active hepatitis is least likely associated with:

- A. drug-induced hepatitis.
B. autoimmune hepatitis.
C. hepatitis B virus infection.
D. hepatitis D virus infection.
E. hepatitis E virus infection.

62. The second most common cause of cirrhosis in the United States is:

- A. post-necrotic cirrhosis.
B. alcoholic cirrhosis. 1st
C. cryptogenic cirrhosis.
D. biliary cirrhosis.
E. hemochromatosis.

63 to 67. Match the following answers with statements:

- A. Chronic persistent hepatitis
B. Chronic active hepatitis
C. Alcoholic hepatitis
D. Fulminant hepatic necrosis spontaneous
E. Cirrhosis

63. Chronic inflammation of portal triads with preservation of limiting plate

64. Extensive confluent hepatocyte necrosis with isolated islands of preserved parenchyma

- B 65. Portal and periportal inflammation, piecemeal and bridging necrosis
 C 66. Swelling and necrosis of random hepatocytes, acute inflammation and Mallory bodies
 E 67. Diffuse fibrosis and regenerative nodules

68. Unconjugated hyperbilirubinemia is most likely produced by;

build up too much bilirubin → cannot conjugate - no conjugating enzyme

- A. gallstones.
 B. hemolytic anemia. ↓ RBC'S
 C. Dubin Johnson syndrome.
 D. biliary atresia.
 E. carcinoma of the head of the pancreas.

69. Peliosis hepatis is associated with:

- A. dilatation of hepatic sinusoids.
 B. jaundice.
 C. hepatic vein thrombosis.
 D. hepatitis C infection.
 E. piecemeal necrosis.

70. Conjugated hyperbilirubinemia is most likely produced by:

- A. hemolytic anemia.
 B. massive gastrointestinal bleeding.
 C. marked reduction in caloric intake.
 D. carcinoma of the head of the pancreas.
 E. Crigler Najjar syndrome. *unconjugated*

71. Hepatic failure is associated with:

- A. hyperalbuminemia
 B. hypercoagulable states.
 C. esophageal varices.
 D. splenomegaly.
 E. encephalopathy.

72. Three weeks after dining at the Greasy Spoon Cafe, a 24 year old develops hepatitis. The cafe is subsequently closed by the Department of Public Health. The most likely cause is:

- A. hepatitis A virus. fecal-oral
 B. hepatitis B virus. → blood
 C. hepatitis C virus. → drug
 D. hepatitis D virus. → HB
 E. hepatitis E virus.

73. A previously healthy 6 year old boy develops a fever of 100 degrees C, attributed to a viral infection. He is treated with aspirin. After seeming to recover, he begins to vomit, becomes comatose and dies 24 hours later. The significant autopsy finding is most likely:

- A. micronodular cirrhosis.
- B. perforated gastric ulcer.
- ☒ C. fatty liver. ✓
- D. pyloric stenosis.
- E. esophageal varices.

Reye's Syndrome

74. The likelihood of a patient with hepatitis A developing a chronic hepatitis is:

- ☒ A. 0%.
- B. about 10%.
- C. about 30%.
- D. about 50%.
- E. almost 100%.

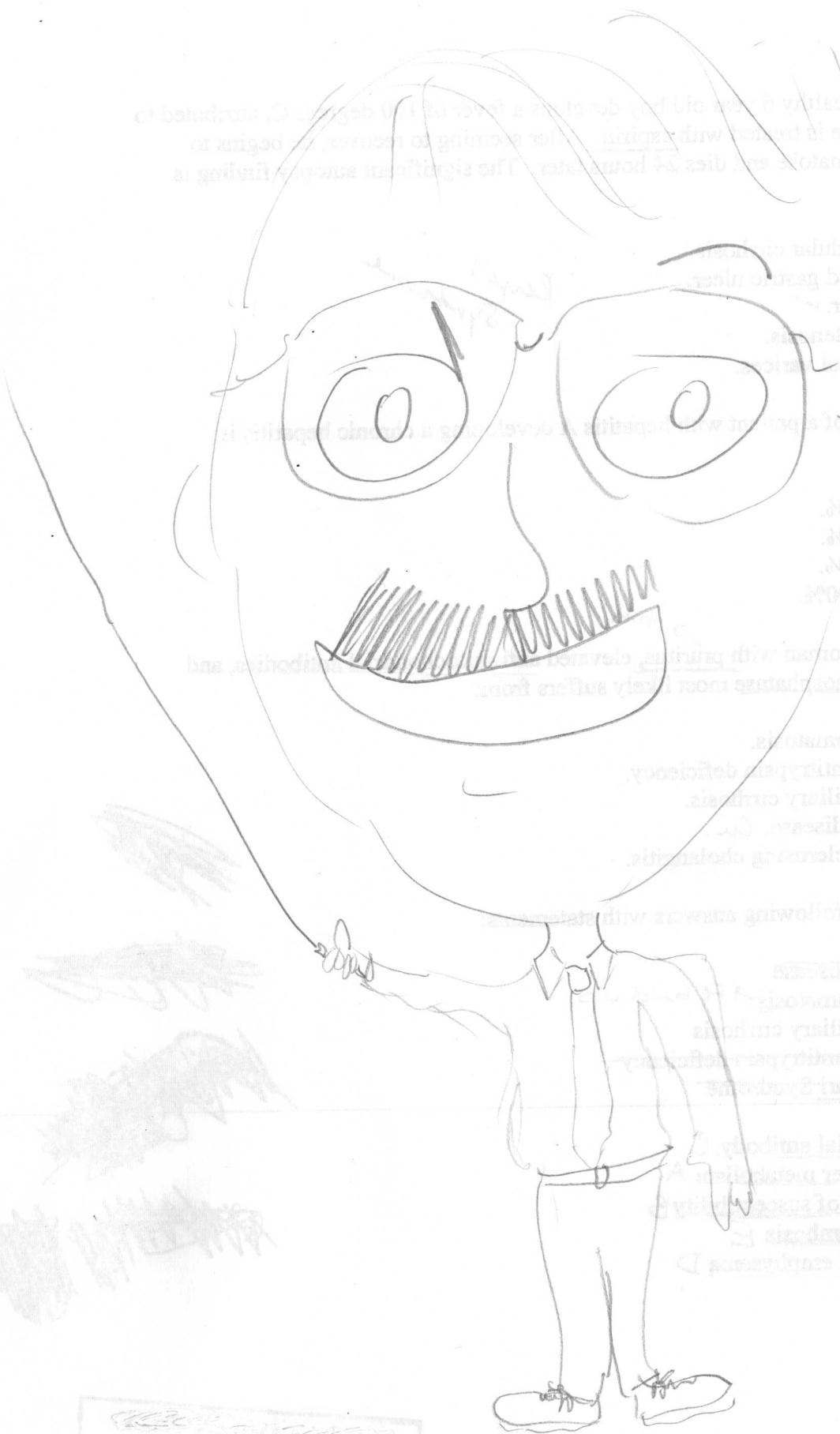
75. A 35 year old woman with pruritus, ^{itch} elevated anti-mitochondrial antibodies, and increased alkaline phosphatase most likely suffers from:

- ☒ A. hemochromatosis.
- B. alpha-1-antitrypsin deficiency.
- ☒ C. primary biliary cirrhosis.
- D. Wilson's disease. *Cu*
- E. primary sclerosing cholangitis.

76 to 80. Match the following answers with statements:

- ~~A. Wilson's disease~~
- B. Hemochromatosis → *Fe build up*
- C. Primary biliary cirrhosis
- ~~D. Alpha-1-antitrypsin deficiency~~
- ~~E. Budd-Chiari Syndrome~~

- ☒ C 76. Anti-mitochondrial antibody. *C*
- ☒ A 77. Disorder of copper metabolism. *A*
- ☒ B 78. HLA-A3 marker of susceptibility. *B*
- ☒ E 79. Hepatic vein thrombosis. *E*
- ☒ D 80. Liver disease and emphysema. *D*



Inflammation...
Nasty, nasty
stuff...

© 2000 by [illegible]