

Inflammation.

AzraNaheed Medical College, Lahore

Pathology Department 3rd Year MBBS (SEQ)

Dated 20/1/2017

Time: 45 min

✓ Q-1 A 60 year old man had severe chest pain and was diagnosed with myocardial infarction on serum enzymes and ECG changes.

a- What are different phases of healing from necrotic tissue to scar formation and how does it differ from healing from a cut in skin (2.5)

b- What are different factors affecting wound healing. (2.5)

2nd intension
Temperature, nutrition,
Infection, medication,
Foreign bodies, Debris.

Q-2 a- A 25 year old man is having cavitating lung lesion. Describe the cross talk between macrophage and lymphocyte for formation of a granuloma and draw a granuloma. (2, 1)

✓ ~~b~~ Name four causes of granulomatous inflammation. (2)

✓ Q-3 a- What are different chemical mediators of inflammation? (2)

b- Describe the role of TNF and Gamma interferon in inflammation. (3)

✓ Q-4 a- A 23 years old boy had an accident and burnt his hand. What is the sequence of events in inflammation? (2.5)

b- What is the most common event of inflammation after burn injury? (1)

c- What are different methods for killing of bacteria? (1.5)

✓ Q-5 What are different morphological patterns of inflammation. Give one example with each? (5)

✓ Q-6 a- A 25 years old male had a surgery done on his hand. After one month the scar became big, what is the diagnosis? (1)

b- What is granulation tissue and what growth factors are responsible at different phases of healing. (0.5, 2) P# 62. Table 2-9

c- Describe the role of myofibroblasts in wound contraction. (1.5)

These have ultrastructural and functional features of contractile smooth muscle cells. By their presence, large skin defects may be reduced to 5-10% of their original size.



Department of Pathology
Azra Naheed Medical College
Grand Test-1, 06 December 2016
MBBS 3rd Year (SEQ)

(General Pathology & General Microbiology)

Name: _____

Roll No: _____

Date: _____

Instructions:

1. All subjective questions are to be attempted on the paper and returned to the invigilator within specified time after you have received the question paper.

Attempt all Questions. Each Question carries 5 marks

- Q-1 (a) Draw and label the cell wall of Gram positive and Gram negative bacteria? (2)
- (b) Make a flow chart to classify Gram Negative rods. (1)
- (c) What is the role of process of fermentation in the respiration of facultative bacteria? (1)
- d. Classify bacteria on the basis of their temperature requirements. (1)

- Q 2. (a) Draw and label the bacterial growth curve. During which phase of growth curve is the affect of antibiotics maximum? *log phase*
(1+0.5)
- (b) Tabulate the differences in the exotoxins and endotoxins. (2)
- (c) Is lipopolysaccharide exotoxin or endotoxin? What is its chemical composition, location and mechanism of action in the causation of disease in human beings? (0.5+1)

- Q3. (a) By which method of sterilization we can sterilize the instruments and bed linen in the hospitals and operation theaters? What is its principle and procedure? *Autoclaving* (0.5+1)
- b. Define the following:
- (i) Plasmids & their medical implications *importance* (1.5)
- (ii) Sterilization
- (iii) Spore and its medical implication *Resistant form of bacteria*.
- c. Name two exotoxin producing bacteria, their mechanism of action and the diseases produced by them. (2) *tetnus, diphtheria*.

Q-4 Depletion of ATP to 5% to 10% of normal levels has widespread effects on many cellular systems.

- (a) Describe it in detail, write down the morphological features as well.3
- (b) What are the major consequences of mitochondrial damage? 2



Department of Pathology
Azra Naheed Medical College
Term Test, 23 April 2019
MBBS 3rd Year (SEQ)

cell inj 100

Time Allowed: 50 min

Total Marks: 40

Name: _____

Roll No: FLB-086

Date: _____

Instructions:

1. All subjective questions are to be attempted on the paper and returned to the invigilator within specified time after you have received the question paper.
2. Neat hand writing and use of margins will increase the outlook and presentation of your paper

Attempt all Questions. Each Question carries 5 marks

Q1) (a) What are the types of Necrosis? Give examples with each type. (3)

(b) Describe the morphology of any two types with examples. (2)

Q2) A 35 year old female patient of type 2 diabetes mellitus cut her hand with knife in the kitchen. The wound failed to heal even after two weeks

(a) What cause/causes of delayed healing you would suspect in this patient? (1)

(b) List four local /systemic factors that influence wound healing? (2)

(c) Trace the steps of healing in this patient. (2)

Q3) Tabulate difference between benign and malignant tumors. (5)

Q4) A 45-year-old female diagnosed with acute cholecystitis. Microscopy revealed neutrophils in the wall.

- Describe the sequence of events in acute inflammation. (2.5)
- Name the mediators of inflammation responsible during different phases. (2.5)

Q5)

- a. Enlist four granulomatous diseases. (2)
- b. Draw and label granuloma. (1.5)
- Describe the role of TNF- α and IL-1 β in inflammation. (1.5)

① cell inj
② rise & repair
③ invol
④ heal
⑤ inj

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amples are



Department of Pathology
Azra Nahed Medical College
Grand Test 26 February 2019
MBBS 3rd Year (SEQ)
(Inflammation, Healing & Repair)

Time Allowed: 50 min

Total Marks: 25

SEQ

Q.1

- a) What are the components of acute inflammation? Briefly discuss the steps involved in leucocytes recruitment 35 (3)
- b) Briefly discuss the outcome of acute inflammation. 42 (2)

Q.2

- a) What are the principal mediators of inflammation? Briefly discuss from where they are derived with examples of each 45 (3)
- b) Enlist leucocyte and endothelial adhesion molecules along with their ligands. 36 (2)

Q.3

A 45yr female belonging to low socioeconomic class presented to medical OPD the history of night sweats, low grade fever, loss of appetite and persistent cough sometimes with hemoptysis. Her CBC report revealed 73% lymphocytosis, with raised ESR. Chest X ray revealed cavitary lesion in mid zone of right lung. Microscopic examination of sputum revealed acid fast pink bacilli with beaded appearance. He was diagno T.B

- a) What will be the microscopic appearance of this lesion? C.I. (2)
- b) What is macrophage-lymphocyte cross talk? 55 (2)
- c) Write short note on chemotaxis 36 (1)

Q.4

Describe the difference between healing by Primary Intention and Secondary Intention. (05)

Q-05

Following the Caesarian section, the Gynecologist applied neat surgical sutures to the incision.

- A. Trace the steps of healing in this patient in chronological order 145-138 (03)
- B. Give the brief account of systemic factors affecting the wound healing (02)

150

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Attempt all Questions. Each Question carries 5 marks

- ✓ 1. A 20 year girl visits her physician complaining of "feeling unwell" with fever, sneezing, chills, muscle aches, dry cough and sore throat. She has had these symptoms for several days with no significant improvement. There is H/O similar illness in other family members.
 - ✓ a. Name the causative agent. Is it a DNA or RNA virus? (1)
 - ✓ b. Distinguish between antigenic shift and drift. What is the impact of each on disease occurrence? (3)
 - ✓ c. Name the two surface proteins present on this virus and their functions? M_1, M_2 (1)
- ✓ 2. A 25-year-old man presents to his physician with nausea, weight loss, malaise, jaundice, and right upper quadrant pain. He fell ill a few months following a return from Thailand, where he spent several months. During this time, he received several extensive tattoos. The physician orders a battery of blood tests including liver enzyme levels and viral antigen tests. Liver enzymes were elevated, and Hepatitis B surface antigens were detected.
 - ✓ a. Name the causative agent and whether it is DNA or RNA virus. (1)
 - ✓ b. What is window period and which serological marker in the serum is used for diagnosis during this time? (2)
 - ✓ c. Tabulate the other serological markers used for the diagnosis of this viral infection along with their interpretation. (2)
- ✓ 3. A lady with acute abdomen was brought to emergency department and was diagnosed as a case of perforated intestine and ileostomy was carried out. Later that patient developed peritonitis, high grade fever and went into Shock.
 - ✓ a. Which type of shock the patient has developed? (0.5)
 - ✓ b. Discuss pathogenesis. (2.5)
 - ✓ c. Name different types of shock with examples. (2)
- ✓ 4. 70-years old bedridden lady develops swelling of right leg. Color Doppler was carried out which revealed deep vein thrombosis. Patient survives the immediate effects of thrombotic vascular obstruction. Treating physician now wants to know the possible of this thrombus.
 - ✓ a. What would be the fate of the thrombus in following days to weeks? (1.5)
 - ✓ b. What is the difference between red and white infarcts? (1)
 - ✓ c. Enumerate the three primary abnormalities that lead to a thrombus formation (called Virchow's triad). (2.5)
- ✓ 5. An HIV-Positive patient has progressed from fatigue, rash, nausea and night sweats symptoms to occasional but defined opportunistic infections.
 - ✓ a. Enlist one opportunistic fungal infection, 1 viral infections and one malignancy associated with AIDS. 1.5
 - ✓ b. Give the clinical course of disease in development in HIV infection. 2
 - ✓ c. Tabulate the structural proteins and genes of HIV. 1.5