F14040

AZRANAHEED MEDICAL COLLEGE

SEQs
Marks: 50
1hour 30 min

3rd Year MBBS. Pathology **Date: 7/3/2017**

Topic: Cell Injury & General Bacteriology, Inflammation,Healing and repair

Q1. A 52 year old lady presents to the gyne department with complaint of irregular menstrual cycle. Her history reveals that her menarche started at 12 years of age. She has two normal deliveries. Her physical examination reveals no abnormality. She is explained that she is undergoing menopause, which is due to programmed cell death.

a. What is the name of this process?(1) apoptosis
b. Enumerate four differences between programmed cell death and necrosis.(2)
c. Enumerate the steps of mitochondrial pathway of apoptosis (2)

Q2. A 45 year old diabetic Bank manager comes to hospital with central chest discomfort for the last 1 hour which is also radiating to left arm and jaw. He has associated nausea, shortness of breath and diaphoresis. His BP is 160/95; HR 95; cholesterol 350mg/dl. His BMI is 26. He smokes 20 ciggarettes per day for last 25 years. He is Diagnosed as a case of myocardial infarcation .

Coagulative necrosis

a. What is the cause of death of myocytes ? (0.5) ~~Ischemia~~ ~~Liquefactive~~ No enzymes
b. Give histological picture of dead myocytes? (1) ↑esonophillia, disruption of lysosom
c. Enumerate various types of the necrosis and give examples.(3,5)

transmission

Q3.a. Enumerate the determinants of bacterial pathogenesis. ~~virulent factor~~ pill capsule
b. Tabulate the differences between exotoxin and endotoxin. (2) exotoxin X endotoxin
c. Define sterilization and disinfection no spore kill (1)

spore kill

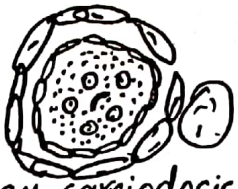
Q4.a. Enumerate differences of Gram positive and Gram negative bacterial cell wall (2) Teichoic acid
b. A 24 year old female taking long term antibiotics has presented with curd like whitish vaginal discharge with pruritus due to suppression of normal vaginal flora. Define normal flora and enumerate normal flora of genitourinary tract in females? Candida ~~vagi~~albicans(3), Strep.epidermad Lactobacillus, Gardenella vaginalis ; bacteriodes

Q5.a. What is pathological calcification?Give examples (2.5)
b. Write down the role of mitochondrial damage during cell injury. Give diagrammatic illustration.(2.5)

Q6. a. Define with example: (3)
I. Anaerobic bacteria bacteriodes , Clostridium .
II. Aerobic bacteria Pseudomonas , Bacillus
III. Facultative anaerobes E.coli

b.Enumerate any two bacteria that cannot be seen on Gram stain. Give reasons and approach. ① M.tuberculosis → acid fast bacilli ③ Chlamydia (2) Intracellu very small
② Mycoplasm → donot have cell wall ④ Rickettsiae

Q7- A 30 year old male complained of fever, night sweats, fatigue, weight loss and shortness of breath for several months. A chest x ray revealed prominent bilateral hilar lymphadenopathy.physical examination reveals cervical lymphadenopathy. A cervical node biopsy was performed which revealed numerous granulomas. M.Tuberculosis



Macrophages, Lymphocytes, Esonophills.

a. Which mediators are primarily involved in formation of the lesion?1
b. Draw and label a granuloma.2
c. Enlist any four major causes of granulomatous inflammation.2 TB, leprosy, sarciodosis.

Q8: a. what are the steps in the extravasation of leucocytes from the vessel lumen to the interstitial tissue? 2
b. enumerate differences between transudate and exudate.2
c. enlist outcomes of acute inflammation. 1

* Margination and rolling
Adhesion
Transmigration, chemotaxis.

Q9 a 35 year old female patient of type 2 DM cut her hand with knife in kitchen. The wound failed to heal after two weeks. The hand looked swollen and there was pus coming out of the wound.

a. What are the causes of delayed healing in this case?1 due to diabetic patient
b. List four other causes of wound healing .2 Infection, Foreign bodies, poor perfusion, Nutrition.
c. What are complications of wound healing?2

Q10: a. what are different types of chemical mediators, write down their source and functions.2
b. what are different mediators involved in angiogenesis?1.5 VEGF, fibroblast growth factor, NO, Angiopoietin 1, 2.
c. what is the role of TNF B in repair? 1.5 (growth promoting activity).

9-a) In diabetes, blood circulation become poor, making it hard for blood needed for skin repair.

9-c) complications

* Deficient scar formation. Dehiscence, ulcer.
* Excessive scar formation. ~~Keloid hypertrophic scar~~.
* Exuberant granulation. desmoid, F
* Deficient (excess) contraction. deformity.

Q.#3 a) Determinants

1) Transmission 2) Adhesion to cell surface
3) Invasion, inflammation, intracellular survival
4) Toxin Production
5) Immunopathogenesis.

Cell Injury.

SEQ

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a. What is the name of this process?(1) apoptosis

b. Enumerate 2 differences between programmed cell death and necrosis.(2)

c- What are the features of reversible cell injury with pathogenesis. 2

Q 2- Define Necrosis, what are different types of necrosis. 3

b- Give one example of sites involved with each type of necrosis. 2

Q-3 A 60 years old male chronic alcoholic dies in a road side accident. On autopsy, the liver was enlarged and yellow and greasy.

a- What is the most likely substance accumulated in liver. 0.5 Lipofuscin.

b- What is the microscopic appearance 1.5

c- What are different types of pigments deposited in cells. 3

Q-4 What are the effects of increased cytosolic calcium on cell. 1.5

b- what are different types of calcification 2

d- what is mechanism of atrophy in a cell 1.5

Q-5 What are different types of cellular adaptations, Give types with one example each. 5

Department of Pathology
Azra Naheed Medical College
Re Grand Test-2, 22 January 2019
MBBS 3rd Year (SEQs)
(Cell Injury)

Time Allowed: 60 min **Total Marks: 25**

Q-1

A. Writ down the morphology of the necrotic cell. 01
B. Give the account of morphological pattern of the two types of necrosis 04

Q-02

A 60 years old, chronic alcoholic dies in an accident. On autopsy, the liver was found moderately enlarged, soft, and greasy.

A. Discuss the pathogenesis of this lesion. 02
B. Describe the microscopic features of this lesion 03

Q-03

A biopsy histological report of endocervix of a 35-year-old lady reveals that it is lined by benign looking stratified squamous epithelium with a Nabothian cyst and infiltrated with chronic inflammatory cells.

A. What is this phenomenon called? metaplasia 01
B. Describe briefly the mechanism of this change with more example 02
C. What is meant by ATROPHY? Enumerate its causes 02

Q-04

A. What are the causes of cell injury? 02
B. Describe the mechanism of irreversible injury 03

Q-05

A 39 years multigravida female delivers a baby. Hypertrophy.

A. What type of cellular adaptations change will occurs in uterus 01
B. Describe four other cellular adaptation changes with example 04

Patho (General)

Azra Naheed Medical College

MBBS 3rd Year Class (Session 2013-14)

5-b

Class Test 5-B (Gen. Pathology SEQs) Dated: 28-04-2014

Name: Hadia Munawar Roll No: 12199 2013-14

Total Time: 20 Minutes Total Marks: 10

Q.1 a. Define Neoplasia (1)

b. Enumerate the common pathways for Metastasis (2)

c. Explain the Nomenclature used to classify the neoplastic tumours (2)

Q.2. a. Give a brief review on clinical application of tumor markers. (3)

b. Enlist oncofetal antigens. Summarise any important tumor marker of this group. (2)

AZRA NAHEED MEDICAL COLLEGE

MBBS 3rd YEAR (Session 2011)

(GEN. PATHOLOGY) CLASS TEST-2

Subject: Pathology (General Pathology) Total marks: 25

Resource Person: Dr. Ayesha Imtiaz / Dr. Aliya Aslam

Time Allowed: 45 Minutes

ATTEMPT ALL THE QUESTIONS:

SEQ's:

Q. 1. a. Define apoptosis (1)

b. Describe intrinsic pathway of apoptosis (4)

Q. 2. a. What is cellular adaptation to injury (1)

b. Explain in detail with examples (4)

Q. 3. a. Give types of necrosis with examples (2.5)

b. Describe mechanisms of vascular permeability with there causes & mediators (2.5)

Q. 4. a. Give morphological patterns of acute inflammation with one Example for each (2)

b. Describe cellular events of acute inflammation (3)

Q. 5. a. Define Granuloma. Enumerate causes of granulomatous Inflammation (3)

b. Enlist mediators of inflammation with there source (2)

Serous inf → skin blister.
Fibrinous inf → Fibrinous pericarditis.
suppurative inf → suppurations + pyogenic infections.
abcess → scar formation.
ulcer → stomach ulcer.

complement
kinin
proteases
> liver

Histamine
Serotonine.
prostaglandin
leukotriene
P.F. factor
Cytokine
chemokines.

Azra Naheed Medical College
MBBS 3rd Year Class (Session 2011)

Class Test IV (General Pathology SEQs) 3-3-2014

Name: Rowshan Tabassum Roll No: 12186

Total Time: 45 Minutes Total Marks: 25

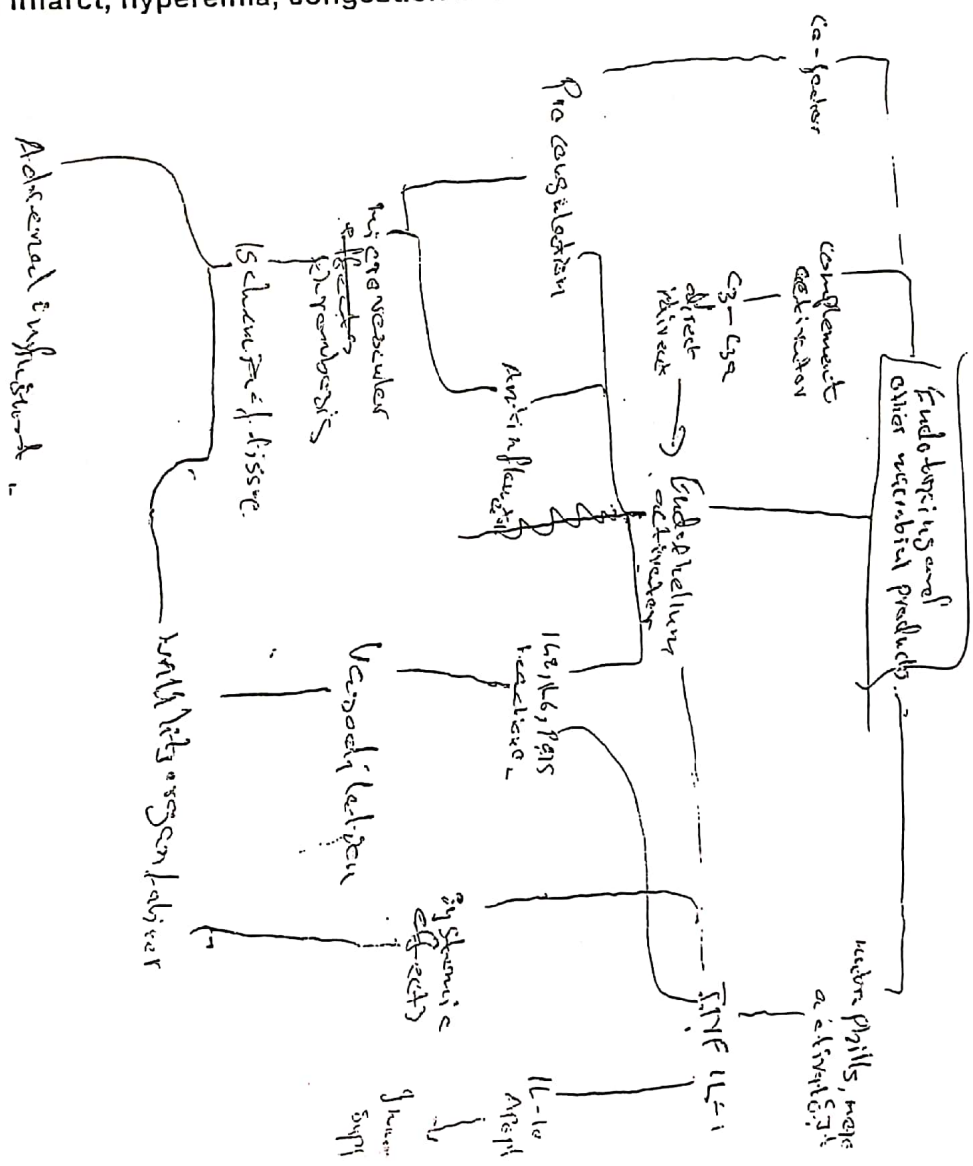
Q.1. Discuss mechanism of action of Tyrosine kinase receptor in mediating role of Epidermal growth factor in healing.

Q.2. Write short note on adult (somatic) stem cells.

Q.3. Define shock.expalin the pathophysiology of septic shock

Q .4. Define hemostasis & explain different steps of primary & secondry hemostasis .

Q .5. Define embolism, infarct, hyperemia, congestion & anasarca with examples



Department of Pathology

Azra Naheed Medical College

Class Test-2, 01 January 2016

MBBS 3rd Year

(General Pathology)

Time Allowed: 60 min **Total Marks: 25**

Name: [illegible]

Roll No: 14134

Date: 9/1/16

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 out look and presentation of your paper.**

Attempt all Questions. Each Question carry 5 marks

1. a. Define inflammation. (01)
   b. Enumerate chemical mediators of inflammation. (02)
   c. Briefly mention the morphological patterns of acute inflammation. (02)

2. a. Define granuloma. (02)
   b. Discuss the role of macrophage in chronic inflammation. (03)

3. Briefly describe vascular and cellular events of inflammation. (05)

4. Define septic shock and expiain the pathophysiology of septic shock. (05)

5. Write down the pathophysiologic categories of edema. (05)

Patho (General)

Azra Naheed Medical College

MBBS 3rd Year Class (Session 2011)

Class Test IV (General Pathology SEQs) 3-3-2014

Name:_____ Roll No: 2013-14

Total Time: 45 Minutes Total Marks. 25

9

Q.1. Discuss mechanism of action of Tyrosine kinase receptor in mediating role of Epidermal growth factor in healing.

Q.2. Write short note on adult (somatic) stem cells.

Q.3. Define shock.expalin the pathophysiology of septic shock

Q 4. Define hemostasis & explain different steps of primary & secondry hemostasis .

Q .5 Define embolism, infarct, hyperemia, congestion & anasarca with examples

(Q3) Shock is systemic hypoperfusion resulting from reduction in either cardiac output or the effective circulating blood volume, followed by impaired tissue perfusion & cellular hypoxia.

(Q4) Hemostasis is a normal physiological process maintaining the blood in a fluid state in normal vessels yet permit the rapid formation of hemostatic clot at the site of vascular injury

Phases of Hemostasis

Batch-1

12

(5)

Patho 2016 (5)

Department of Pathology

Azra Naheed Medical College

Class Test-5, 01 April 2016

(Subjective Part)

Gorna

Ishtiaq

Time Allowed: 60 minutes **Total Marks: 25**

Name: 14151

Roll No: _____

Date: 1-April 16

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 out look and presentation of your paper.**

Attempt all Questions. Each Question carry 5 marks

1. a. Discuss the two pathways of apoptosis. (3)
   b. Describe the free radical mediated injury to the cell. (2)

2. a. Define necrosis. Discuss its morphological types with examples. (3)
   b. Differentiate between dystrophic and metastatic calcification. Give two examples of each. (2)

3. Define metaplasia. Discuss its mechanism and give two examples. (5)

4. a. What are the functions of complement system and name serum proteins involved? (3)
   b. Differentiate between innate and adaptive immunity in tabulated form. (2)

5. Name Antigen presenting cells. Explain mechanism for endogenous antigen presentation. (5)

Dendritic cell
Macrophage
Activated B-cell

Cell injury + Immunity
1st half

Batch-3