

INFLAMMATION 500

1. 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.
 - a. Which mediators are primarily involved in formation of the lesion? Explain diagrammatically. (2)
 - b. Draw and label a granuloma. (1)
 - c. Enlist any four major causes of granulomatous inflammation. (1) - 147488
2. a. What are the vascular events of acute inflammation? (2.5)
b. Enumerate differences between transudate and exudate. (1.5)
c. Enlist outcomes of acute inflammation. (1)
3. What are different chemical mediators and their role in acute inflammation? (5) p
4. A 35 year old diabetic female had a deep cut on her hand. The wound fails to heal.
 - a. What is the cause of delayed wound healing in this case? What is the type of healing in this case? (1)

- b. Tabulate the differences between the intentions of wound healing? (3)
- c. What is the difference between keloid? (1)
- d. Explain the morphological patterns of acute inflammation with examples? (3)
- e. Enlist the factors involved in delaying wound healing. (2)

b

AZRA NAHEED MEDICAL COLLEGE
3rd Year MBBS, Pathology Test
INFLAMMATION
SEQ

Marks: 40

Time allowed: 70 minutes

Q. No 1 (a) Enumerate three steps in the extravasation of leucocytes from the vessel lumen to interstitial tissue. 1.5

(b) Write down the major effects of interleukin 1 and tumor necrotic factor in inflammation. 3.5

Q. No 2 With the help of table or a flow chart, explain the generation of arachidonic acid metabolites and their principle effects. 5

Q. No 3 (a) Define acute inflammation and write down its three major components. 2

(b) Write down the process of increased vascular permeability in response to acute inflammation. 3

Q. No 4 Name different morphological pattern of acute inflammation giving an example of each. 5

Cellular exudate of acute inflammation

b- Write down differences between exudate and transudate. 2.5

Q-6- Write notes on

a- Chemotaxis 2.5

b- Killing and degradation. 2.5

Q-7 Write down the role of activated macrophage in Chronic inflammation 1.5

b- Name two chronic inflammatory disorders 1

CNO:01

2020

Cell injury + Inflammation:-

Repaired

Repairing by the connective tissues deposition consist of a series of sequential steps that follow tissue injury

(1) Hemostatic Plugs:-

within the few minutes after injury a hemostatic plug is formed which is composed of the platelets and provides the scaffolding for infiltrate the inflammatory response.

(2) Inflammation:-

consists of the acute and the chronic inflammation. Breakdown of the products of the complement activation, chemokines released from the platelets helps in the recruitment of the neutrophils and monocytes to the site of the injury.

(3) Cell Proliferation:-

Takes up to 10 days in which the endothelial cells, vascular cells and fibroblasts migrate to close the new wound.

(4) Remodelling:-

Connective tissue deposition by the fibroblasts is recognized to produce the subtle scars.

ON:087

Causes of the Apoptosis:-

Physiological:-

- During the embryogenesis.
- Turnover of the inflammatory tissues.
- Involution of the hormone dependent tissues.
- Decline in the number of the leukocyte at the end of the immune and the inflammatory response.

Pathological:-

- DNA damage
- Accumulation of the misfolded proteins
- Infections, especially the viral infections

Mechanism of the Apoptosis:-

Normal cells

condensation of the chromatin

↓

membrane blebs

↓

cellular fragmentation

↓

Apoptotic bodies

Apoptotic bodies

↓

Phagocyte

phagocytosis of the apoptotic body and fragments