بسم الله الرحمن الرحيم

Physiology

MID | Past Papers

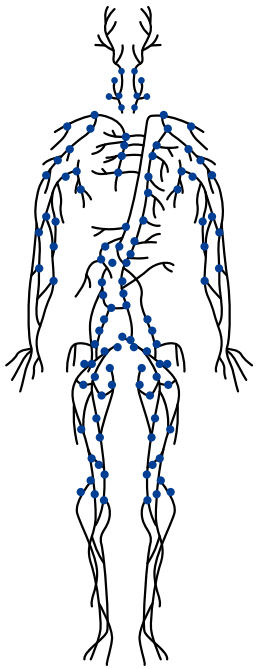
﴿ وَقُل رَّبِّ أَدْخِلْنِي مُدْخَلَ صِدْقٍ وَأَخْرِجْنِي مُخْرَجَ صِدْقٍ وَاجْعَل لِّي مِن لَّدُنكَ سُلْطَانًا نَّصِيرًا ﴾

ربنا آتنا من لدنك رحمة وهيئ لنا من أمرنا رشدًا

Lectures 6-7

Written by: Ibraheem Samarah

Reviewed by: Yazan Aldebei



LEC 6-7

Q1: A baby is injected with a strong antigen during the third trimester to 6 months after birth what is mostly likely to happen?

A) Specific clones of T lymphocyte will recognize the antigen and reside in a lymphoid organ
B) Specific clones of B lymphocyte will recognize the antigen and reside in a lymphofoid organ
C) Specific clones of both T and B lymphocyte will recognize the antigen and reside in a lymphoid organ
D) No specific clones will recognize the antigen
E) Hypersensitivity reaction will develop

Answer:D

Q2: **A patient aged 10 years old comes with decreased immunoglobins and he has abnormal acute or delayed sensitivity skin reactions, what is most likely to be affected:**

- A) Helper T cells
- B) Cytotoxic T cells
- C) B cells
- D) Plasma cells

Answer:A

Q3: Chronic allograft rejection results primarily from the action of what effector cell type?

A. Activated macrophages

B. Helper T lymphocytes

C. Cytotoxic T lymphocytes

D. Dendritic cells

Answer:c

Q4: What will occur after presentation of antigen by a macrophage?

A) Direct generation of antibodies

B) Activation of cytotoxic T cells

C) Increase in phagocytosis

D) Activation of helper T cells

Answer:D

Q5: CD4 is a marker of which of the following

A. B cells

B. Cytotoxic T cells

C. Helper T cells

D. An activated macrophage

E. A neutrophil precursor

Answer:c

Q6: Which of the following is true about helper T cells?

A. They are activated by the presentation of antigen by an infected cell

B. They require the presence of a competent B-cell system

C. They destroy bacteria by phagocytosis

D. They are activated by the presentation of antigen by macrophage or dendritic cells

Answer:D

Q7: What is the function of IL-2 in the immune response

A) Binds to and presents antigen

B) Stimulates proliferation of T cells

C) Kills virus-infected cells

D) Is required for an anaphylactic response

Answer:B

Q8: Which of the following applies to cytotoxic T cells

A. They require the presence of a competent B-lymphocyte system

B. They require the presence of a competent suppressor T-lymphocyte system

C. They are activated by the presentation of antigen by an infected cell

D. They destroy bacteria by initiating macrophage phagocytosis

Answer:c

Q9: Presentation of antigen on major histocompatibility complex (MHC)-I by a cell will result in which of the following?

A. Generation of antibodies

B. Activation of cytotoxic T cells

C. Increase in phagocytosis

D. Release of histamine by mast cells

Answer:B

Q10: Which of the following statements best describes the role of MHC molecules in antigen presentation?

- A. They allow B cells to recognize intact antigens.
- B. They enable T cells to recognize free-floating antigens.
- C. They present antigen fragments to T cell receptors for recognition.
- D. They directly destroy infected cells.

Answer:c

Q11: Which of the following cytokines is primarily involved in the stimulation of cytotoxic T cells?

- A. IL-1
- B. IL-2
- C. IL-4
- D. IL-6

Answer:B

Q12: **Failure of immunologic tolerance can lead to which of the following conditions?**

- A. Rheumatic fever and Myasthenia gravis
- B. Common cold and influenza
- C. Leukemia and leukopenia
- D. Anaphylaxis and asthma

Answer:A

Q13: Failure to delete self-reactive T cell clones during thymic selection most directly leads to:

- A. Loss of cytokine signaling
- B. Autoimmunity
- C. Immunodeficiency
- D. Hypersensitivity type I

Answer:B

For any feedback, scan the code or click on it.

Corrections from previous versions:

Versions	Slide # and Place of Error	Before Correction	After Correction
V0 → V1			
V1 → V2			