

# 1- A biopsy was taken from a patient and it was not cancer. Instead, they found out that it was chronic inflammation, what did they see?

- a. Fibrosis, macrophages, lymphocytes, plasma cells
- b. Neutrophils and macrophages
- c. Eosinophils
- d. Histamine and Heparin

#### 2- IL-17 is mainly responsible for:

- a. Neutrophil recruitment
- b. Macrophage maturation
- c. T cells maturation
- d. Eosinophil recruitment

# 3- A specimen shows granuloma with caseous necrosis, which of the following is correct?

- a. It is an acute inflammation
- b. Using acid-fast stain most likely won't do anything
- c. You should rule out tuberculosis
- d. It is probably of unknown etiology

#### 4- Which of the following is true regarding M2 pathway?

a-It is also called the classical pathway

b-It is activated by the presence of microbes

c-It stops inflammation and promotes repair

d-Macrophages start producing IL- 1 and chemokines

# 5- A liver biopsy showed that a patient has a noncaseating granuloma. Which of the following disease can cause this condition?

- a. Tuberculosis
- b. Sarcoidosis
- c. Syphilis
- d. Asthma

# Answers

Q	1	2	4	5
	Α	Α	С	В

اللهم عليك بأعدائك أعداء الدين، اللهم رد عنا كيدهم وفل حدهم وأزل دولتهم واذهب عن أرضك سلطانهم ولا تدع لهم سبيلاً على أحد من عبادك المؤمنين.

#### 6- Which of the following are pain mediators?

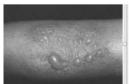
- a. Chemokines
- b. Prostaglandins and bradykinin
- c. Histamine
- d. Platelet-activating factor

#### 7- Caseous necrosis is most likely found in:

- a. Peritoneal cavity
- b. Tuberculosis
- c. Myocardial infarction
- d. Pancreatic tissue

# 8- Below is a picture of a hand deft) and its pathologic microscopic image. The best description of this type of reaction is?

- a. Ulcerative inflammation
- b. Fibrinous inflammation
- c. Suppurative inflammation
- d. Serous inflammation
- e- Exudative inflammation





#### 9- The major function of the alternatively activated macrophage (M2) is?

- a. Inhibition of inflammation and activation of repair
- b. Bacterial recognition
- c. Nitric oxide production
- d. Activation and stimulation of viral intracellular killing
- e. Opsonization and phagocytosis

# 10- Which one of the following histopathological findings would be most consistent with Sarcoidosis?

- a. Serous transudative inflammation
- b. Non-necrotizing granulomatous inflammation
- c. Suppurative exudative inflammation
- d. Ulcerative inflammation
- e. Necrotizing granulomatous inflammation

## **Answers**

Q	6	7	8	9	10
	В	В	D	Α	В

اللهم انصر أهل فلسطين على من عاداهم اللهم صوب رميهم اللهم ثبت الارض تحت أقدامهم اللهم اجعل نار اعدائهم برد وسلام على المسلمين.

#### 11- What type of inflammation is seen in blisters?

- a. Purulent inflammation
- b. Serous inflammation
- c. Ulcerative inflammation
- d. Fibrinoid inflammation

#### 12- M2 macrophages are responsible for which of the following?

- a. inhibition of inflammation
- b. promoting repair
- c. secreting IL-10
- d. All of the above

# 13- The pathologist calls you to let you know that your patient tissue biopsy revealed the presence of "necrotizing granulomatous inflammation", What would be the most important question to ask the pathologist?

- a. Was there any atypical mitosis?
- b. Were there asteroid bodies in the granulomas?
- c. Were the granulomas large or small?
- d. Was there an increase in the number of plasma cells?
- e. Did you do acid-fast stain (tuberculosis stain)?

#### 14- Which of the following is a common mediator in all complement pathways?

- a. Lectins
- b. IgG Antibodies
- c. Mannose
- d. C3

## 15- Mediators that are secreted by alternatively activated (M2) macrophages:

- a. IL-12
- b. TNF, IL-1 and IL-6
- c. IL-4 and IL-5
- d. growth factors and IL-10

# **Answers**

Q	11	12	13	14	15
	В	D	Е	D	D

نعوذ بكَ يا الله من هذا العجز ونحن نرى إخواننا ولا نستطيع صرفًا ولا دفعًا ولا وصولاً اللهم إنا نشكو إليك ضعف قوتنا وقلة حيلتنا وهواننا على الناس اللهم إنّا نستودعك المسجد الأقصى مسرى رسول الله يا من لا تضيعُ عنده الودائع فأحفظهم بحفظك و رعايتك

#### 16- Which of the following is correct regarding granulomas?

- a. They are full of epithelial cells
- b. They indicate acute inflammation
- c. Sarcoidosis is diagnosed by exclusion
- d. If granuloma is caseating, don't think about TB

#### 17- Induction of pain is mainly through:

- a. Cytokines
- b. Platelet activating factors
- c. Leukotrienes
- d. Kinins

#### 18- Which of the following is wrong regarding granulomas?

- a. They indicate chronic inflammation
- b. Causes can be infective or non-infective
- c. Epithelioid histiocytes are recruited by B cells
- d. None of the above is wrong

# 19-Which of the following induce recruitment of neutrophils and macrophages in both chronic and acute int lammation?

- a. IL-10
- b. IL-12
- c. IL-17
- d. IL-6

## 20- Which of the following cells live in the tissue for years?

- a. Neutrophils
- b. macrophages
- c. Eosinophils
- d. Basophils

# 21- All of the following are caused by activation of M2 macrophages by the alternative pathway except?

- a. Wound repair
- b. Fibrosis
- c. Anti-inflammatory effects
- d. Phagocytosis

## 22- Which part of complement system works as an opsonin?

- a. C3a
- b. C5a
- c. C3b
- d. C9

#### **Answers**

Q					20		
	С	D	С	С	В	D	С

## يقول القاضي ابن شدَّاد:

" وكان صلاح الدين إذا سمع أنَّ العدو قد داهم المسلمين خرَّ إلى الأرض ساجداً لله، داعياً بهذا الدعاء: "اللهم قد انقطعت أسبابي الأرضية في نصرة دينك، ولم يبق إلا الإخلاد إليك، والاعتصام بحبلك، والاعتماد على فضلك، أنت حسبي ونعم الوكيل"

#### 23- What is the mechanism of transudative effusion in congestive heart failure?

- a. Increased hydrostatic pressure
- b. Decreased oncotic pressure
- c. Retraction of endothelial cells
- d. Transmigration of WBCs

#### 24- Which of the following is wrong regarding complement system?

- a. It has multiple pathways of activation
- b. Complement proteins are found intracellularly inside lysosomes
- c. Complement proteins have different functions
- d. Complement proteins can be found without inflammation

25- A 29-year-old man hospitalized for acquired immunodeficiency syndrome (AIDS) is found to have pulmonary tuberculosis. Which type of necrosis is found in the granulomatous lesions (clusters of modified macrophages) characteristic of this increasingly frequent complication of AIDS?

- a. Caseous
- b. Coagulative
- c. Fibrinoid
- d. Liquefactive

#### 26- Which of the following mediators are cytokines produced by MACs?

- a. Bradykinin.
- b. Prostaglandin.
- c. Histamine.
- d. Tumor necrosis factor (TNF).

#### 27- Mast cells can produce:

- a. Histamine.
- b. Prostaglandins.
- c. Leukotrienes.
- d. All of the above.

## 28- Syphilis is caused by:

- a. Treponema pallidum.
- b. Mycobacterium tuberculosis.
- c. Mycobacterium lepae.
- d. Gram-negative bacillus.

## 29- Tuberculosis is caused by:

- a. Mycobacterium tuberculosis.
- b. Mycobacterium lepae.
- c. Treponema pallidus .
- d. Gram negative bacillus.

#### **Answers**

Q	23	24	25	26	27	28	29
	Α	В	Α	D	D	Α	Α

(وَإِنَّ جُندَنا لَهُمُ الغالِبونَ)

#### 30- the origin of resident MAC is

- a. yolk sac
- b. bone marrow C thymus
- c. liver
- d. all of them

#### **Answers**

Q	30
	Α

كلما دعتك نفسك إلى معصية، تذكّر أنَّ أمَّتك جريحة تنتظر من يحمل همَّها، ويتلمس طريق عزَّتِها، ومعصيتك وغفلتك تجعلك عبئًا جديدًا على أمتك!

" إن ينصركم الله فلا غالب لكم"
اللهم انصر إخواننا المسلمين في فلسطين
اللهم سلم غزه وأهلها وأرضها ومن عليها
واحفظهم بحفظك اللهم كن لهم عوناً ومعينا

اللهم يا ربّ إنّ لنا أهل وأحبّة، يشهدون لكَ بالوحدانيّة، اللهم كن لأهلنا في قطّاع غزّة الصّامد، واجزهم الخير عن هذا الصّمود الطّويل، انصرهم على من عاداهم، وعلى من خذلهم يا ربّ العرش العظيم.