

1 Which of the following can not recognize microbes

a Mast cell

B Macrophage

C Dendritic cell

D Non of the above

2 In acute inflammation the main cell present

A neutrophils

B mac

C mast

D a+b

E all of the above

3 The inflammation can be bad when

A too much damage

B misdirected

C chronic inflammation

D all of the above

4 In acute respiratory distress syndrome the main cell involved

A neutrophils

B mac

C Eosinophils

D complement

E all of them

5 In asthma the main immune compartment involved

A Eosinophils

B IgE antibodies

C monocyte

D a+B

E all of the above

6 In glomerulonephritis the main immune compartment involved is

A antibodies

B complement

C neutrophils

D monocyte

E all of them

7 The recognition of the microbes can done by

A cellular receptors

B sensor of cell damage

C circulating protein

D A+B

E all of the above

8 The main cause of edema (transudate) is

A decrease colloid osmotic pressure

B increase hydrostatic pressure

C Decrease hydrostatic pressure

D increase colloid pressure

E A+B

9 transudate can be happen in

A liver disease

B kidney disease

C heart failure

D venous outflow obstruction

E all of them

10 pus is rich in

A WBCs

B debris

C microbe

D A+B

E all of them

Answer 1-D,2-A,3-D,4-A,5-D,6-E,7-E,8-E,9-E,10-E

11 the earliest event in inflammation is

A erythema

B edema

C pus

D loss of function

E we can not determine

12 the origin of resident mac is

A yolk sac

B bone marrow

C thymus

D liver

E all of them

13 Which of these statement is false

A life span of neutrophils 1-2 days

B neutrophils produce ROS more than MAC

C mac produce NO more than neutrophils

D mac produce cytokines more than neutrophils

E non of them

14 which of these statement is false

A neutrophils can form NETs at death

B half span of inflammatory mac days or weeks

C half span of resident mac can reach years

D neutrophils secrete lysosomal enzyme more than mac

E non of the above

15 the cytokines that promote expression of selectin and integrin is

A IL-1

B TNF

C IL-6

D A+B

E all of them

16 the main function of chemokines is

A recruitment of leukocyte into tissue

B pain

C fever

D repair tissue

E all of them

17 which of these statement is false

A cd 31 (PECAM-1) expressed on both of leukocyte and endothelial cells

B WBCs pierce through wall by collagenases

C the main function of chemoattractant is transfer of WBCs to injury tissue

D the main source of nitric oxide is arginine

E non the above

18 the main required of tissue repair is

A produce mediators

B cellular proliferation

C interact cell with ECM

D A+B

E all of them

19 in stable tissue in normal condition is

A continuous regenerate

B in G0

C not regenerate

D b+C

E all of them

20 which of the following is consider labile tissue

A epithelial of mucosal surface

B bone marrow

C liver

D kidney

E A+B

Answers 11-A,12-A,13-E,14E,15-D,16-A,17E,18-E,19-D,20-E

21 what is the determine if the repair will be done by regeneration or scar formation

A deep of injury

B type of cytokines

C normality of the bodies

D site of injury

E A+D

F all of the above

ANSWER E

22 what is the different between first and second intention

Ans: intensity

23 which of these step take more time in repair



A hemostatic

B produce cytokines

C cell proliferation

D remodeling

E we can not determine

Answer d

24 what is the true about angiogenesis

A formation of blood vessel

B scar formation

C central roll in healing

D a+C

E all of the above

Answer d

25the first step in angiogenesis is

A basement membrane degradation

B removing the pericyte

C pericyte recruitment

D formation of new vessel

E all of them

Answer b

26 the angiopoietin is

A pericyte detachments

B basement membrane degradation

C interact with ECM

D notch signaling

E non of them

Answer a

27 The most important growth factor is

A PDGF

B FGF

C TGF-B

D all of them

E B+C

Answer c

28 in remodeling

A formation cross linking between collagen

B make scar strong and contract

C switching type 3 of collagen into type 1

D all of them

E a+b

Answer d