## 18. During an inflammatory response, what is the correct order of cellular events?



- A) Filtration of monocytes from blood, increased production of neutrophils, activation of tissue macrophages, infiltration of neutrophils from the blood
   B) Activation of tissue macrophages, infiltration of neutrophils from the blood, infiltration of monocytes
- C) Increased production of neutrophils, activation of tissue macrophages, infiltration of neutrophils from the blood, infiltration of monocytes from blood

from blood, increased production of neutrophils

D) Infiltration of neutrophils from the blood, activation of tissue macrophages, infiltration of monocytes from blood, increased production of neutrophils

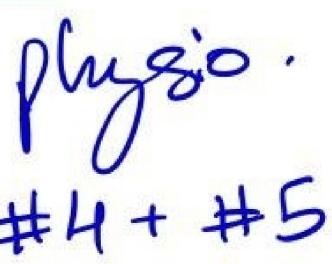
- 25. An 8-year-old boy frequently comes to the clinic for persistent skin infections that do not heal within a normal time frame. He had a normal recovery from the measles. A check of his antibodies after immunizations yielded normal antibody responses. A defect in which of the following cells would most likely be the cause of the continual infections?
  - A) B lymphocytes
  - B) Plasma cells
  - Neutrophils
  - D) Macrophages
  - E) CD4 T lymphocytes
- 26. Which cell type migrates into inflammatory sites to clean up necrotic tissue and direct tissue remodeling?
  - A) Neutrophil
  - B) Macrophage
  - C) Dendritic cell
  - D) Eosinophil



- 19. A 45-year-old man presents to the emergency department with a 2-week history of diarrhea that has gotten progressively worse during the past several days. He has minimal urine output and is admitted to the hospital for dehydration. His stool specimen is positive for parasitic eggs. Which type of WBC would have an elevated number?
  - A) Eosinophils
    - B) Neutrophils
  - C) T lymphocytes
  - D) B lymphocytes
  - E) Monocytes
- 20. A 24-year-old man came to the emergency department with a broken leg. A blood test revealed his WBC count to be 22 × 10<sup>3</sup>/μl. Five hours later, a second blood test revealed values of 7 × 10<sup>3</sup>/μl. What is the cause of the increased WBC count in the first test?
  - A) Increased production of WBCs by the bone marrow
  - B) Release of pre-formed, mature WBCs into the circulation
  - C) Decreased destruction of WBCs
  - D) Increased production of selectins

- 23. A 65-year-old alcoholic experienced chest pain and cough with an expectoration of sputum. A blood sample revealed that his WBC count was 21,000/μl. What is the origin of these WBCs?
  - A) Pulmonary alveoli
  - B) Bronchioles
  - C) Bronchi
  - D) Trachea

Done marrow



## 22. Adhesion of WBCs to the endothelium is

- Due to a decrease in selectins
- (B) Dependent on activation of integrins
- C) Due to the inhibition of histamine releaseD) Greater on the arterial than on the venous side of the circulation

39. Activation of the complement system results in which action?

A) Binding of the invading microbe with IgG

B) Inactivation of eosinophilsC) Decreased tissue levels of complement

D) Generation of chemotactic substances

- 29. What is the term for binding of IgG and complement to an invading microbe to facilitate recognition?

  A) Chemokinesis
  - (B) Opsonization(C) Phagolysosome fusion

D) Signal transduction

- 27. A 3-year-old child who has had frequent ear infections is found to have reduced immunoglobulin levels and is unresponsive to vaccination with tetanus toxoid. However, the child has normal skin test reactivity (delayed redness and induration) to a common environmental antigen. Which cell lineage is not functioning normally?
  - A) Macrophages
  - B) Helper T cells

C) Cytotoxic T cells
D) B cells = immeg (obulins. Vaccine)

- 17. Which phagocytes can extrude digestion products and continue to survive and function for many months?
  - A) Neutrophils
  - B) Basophils
  - (C) Macrophages
  - D) Eosinophils

ledure #4