Assignment

Please find the answer for the following questions:

1. Explain how a defect in the B-cell, T-cell, myeloid, or complement systems can lead to typical clinical manifestations.

2. Discuss how laboratory tests can be used to diagnose and monitor the different types of congenital immunodeficiency syndromes.

3. Distinguish common variable immunodeficiency from Bruton's X-linked agammaglobulinemia.

4. A 3-year-old female appeared to be developmentally slow. She had several facial anomalies, including a small jaw and ears that were set farther back than usual. She seemed prone to infections, especially yeast infections. Laboratory testing results were as follows: red cell count was normal; white cell count was low normal; and a differential white cell count indicated a decrease in lymphocytes. Flow cytometry results demonstrated that the decrease in lymphocyte population was caused by low numbers of T cells.

a. What immunodeficiency do you suspect?

b. Are the facial anomalies linked to the immunologic findings?

c. What kinds of treatment are possible?

5. T-cell subset enumeration by flow cytometry would be most useful in making the diagnosis of which disorder?

a. Bruton's agammaglobulinemia

b. Severe IgA deficiency

c. SCID

d. Multiple myeloma

6. Which of the following statements applies to Bruton's X-linked agammaglobulinemia?

a. It typically appears in females.

b. There is a lack of circulating CD19 positive B cells.

c. T cells are abnormal.

d. There is a lack of pre-B cells in the bone marrow.

7. DiGeorge anomaly may be characterized by all of the following *except*

a. autosomal recessive inheritance.

b. cardiac abnormalities.

c. parathyroid hypoplasia.

d. decreased number of mature T cells.

8. Name five classes of drugs that can be used for the management of HIV infection.

9. Discuss how infection with HIV-1 can lead to gradual impairment of immune function.

10. Suggest one of HIV viral proteins as a potential novel therapeutic target and explain your selection.

11. Define immune reconstitution inflammatory syndrome.

12. Describe the effects of glucocorticoid in causing immune deficiency.