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Assignment answer

1. PRIMARY IMMUNODEFICIENCY DISORDER

* WISKOTT-ALSRICH SYNDROME (WAS); is a rare X-linked recessive disease characterized by eczema, thrombocytopenia (low platelet count), immune deficiency, and bloody diarrhea (secondary to the thrombocytopenia). It is also sometimes called the eczema-thrombocytopenia-immunodeficiency syndrome . The WAS-related disorders of X-linked thrombocytopenia (XLT) and X-linked congenital neutropenia (XLN) may present similar but less severe symptoms and are caused by mutations of the same gene.
* CHRONIC GRANULOMATOUS DISEASE(CGD); is an inherited primary immunodeficiency disease (PIDD) which increases the body’s susceptibility to infections caused by certain bacteria and fungi. Granulomas are masses of immune cells that form at sites of infection or inflammation.
* .BENTA DISEASE

BENTA disease is a rare genetic disorder of the immune system caused by mutations in the gene CARD11. The disease is characterized by high levels of certain immune cells starting in infancy, an enlarged spleen, enlarged lymph nodes, immunodeficiency, and an elevated risk of lymphoma, a type of cancer.

* AGAMMAGLOBULINEMIA; Agammaglobulinemia is a group of inherited immune deficiencies characterized by a low concentration of antibodies in the blood due to the lack of particular lymphocytes in the blood and lymph. Antibodies are proteins (immunoglobulins, (IgM), (IgG) etc) that are critical and key components of the immune system. They are essential if the immune system is to do its job of fighting off bacteria, viruses, and other foreign substances that threaten the body. The specialized precursor cells that produce gammaglobulins, fail to develop or function properly leading to the deficiency in the number of mature lymphocyte cells called B cells.
* CASPASE EIGHT DEFICIENCY STATE (CEDS)

Caspase eight deficiency state, or CEDS, is a very rare genetic disorder of the immune system caused by mutations in the CASP8 gene. CEDS is characterized by an enlarged spleen and lymph nodes, recurrent sinus and lung infections, recurrent viral infections, and a low level ofinfection-fighting antibodies. NIH researchers first described this condition in two siblings in 2002.

1. SECONDARY IMMUNODWFICIEENCY DISORDER

* MULTIPLE MYELOMA: it’s a cancer of plasma cells The plasma cells are a type of white blood cell in the bone marrow. With this condition, a group of plasma cells becomes cancerous and multiplies. The disease can damage the bones, immune system, kidneys and red blood cell count.
* LEUKEMIA: Leukemia is cancer of the body's blood-forming tissues, including the bone marrow and the lymphatic system. Many types of leukemia exist. Some forms of leukemia are more common in children. Other forms of leukemia occur mostly in adults.

Leukemia usually involves the white blood cells. Your white blood cells are potent infection fighters — they normally grow and divide in an orderly way, as your body needs them. But in people with leukemia, the bone marrow produces abnormal white blood cells, which don't function properly.