

Immunodeficiency

1 Read the following text and answer the questions below.

Immunodeficiency – also known as immunocompromisation – is the diminished ability of the body to fight infections and other diseases. It results from a malfunction or lack of elements of the immune system, including lymphocytes, phagocytes and the complement system.

The most common causes of immunodeficiency are HIV, malnutrition and unsanitary conditions. Also aging, lack of sleep and not enough protein in your diet can reduce your immune defences.

Immunodeficiency disorders disrupt your body's ability to fight infection and diseases. So, they make it easier for you to catch viruses and bacterial infections.

These conditions may affect any part of the immune system. Most often, they occur when special white blood cells called T or B lymphocytes (or both) do not function normally or your body does not produce enough antibodies.

Immunodeficiency disorders can be either congenital or acquired.

Congenital – or primary – immunodeficiency disorders are those you were born with. They are a group of inherited conditions affecting the immune system, due to a lack of, or dysfunction of white blood cells, which have important roles in fighting infections. Having a compromised immune system can be serious and can lead to chronic illness, permanent organ damage or even death. People who have a family history of primary immunodeficiency disorders have a higher risk for developing primary disorders themselves.

Acquired – or secondary – immunodeficiency disorders are those you get later in life. They

may be caused by anything that weakens your immune system: drugs which affect the functions of both T and B lymphocytes, viral infections, chronic conditions (like diabetes or cancer) and insufficient nutrition.

Examples of secondary immunodeficiency disorders include: AIDS, cancers of the immune system (like leukaemia), immune-complex diseases (like viral hepatitis), multiple myeloma (cancer of the plasma cells, which produce antibodies).

Unlike primary immunodeficiencies, which have a genetic basis, secondary immunodeficiencies are often reversible if the underlying cause is resolved.

People may also suffer from a condition opposite to immunodeficiency, which is autoimmunity. An overactive immune system that attacks healthy cells as though they were foreign bodies is called an autoimmune response. Deficiency in vitamin D is associated with increased autoimmunity as well as an increased susceptibility to infection.

Blood tests can determine if you have typical levels of infection-fighting proteins (immunoglobulins) in your blood and measure the levels of blood cells and immune system cells. Having numbers of certain cells in your blood that are outside of the standard range can indicate an immune system defect.

An immunologist treats health issues brought on by immune system problems. Also known as allergists, immunologists are doctors who diagnose, treat and work to prevent immune system disorders.

1. How do you explain immunodeficiency?
2. What is another name for immunodeficiency?
3. What are the possible reasons for immunodeficiency?
4. What are the two types of immunodeficiency disorders?
5. How do these two groups of disorder differ?
6. What are some examples of secondary immunodeficiency disorders?
7. Is secondary immunodeficiency reversible?
8. Is immunodeficiency the same as autoimmunity?
9. How do you know if you have immunodeficiency?
10. Who treats immunodeficiency?