

Immune System Disorders Fast Facts

1. The body's immune system involves a complex network of organs, cells and proteins located throughout the body. The immune system defends against infections from germs (such as bacteria, viruses, fungi, parasites), and other invaders (such as cancer cells), whilst protecting the body's own cells.
2. In most people their immune system is an effective network that responds and adapts to defend the body against infections and cancer. However, some people have immune system disorders, that are due to underactive immune systems (immunodeficiencies) or overactive immune responses (autoimmunity or allergies).
3. Overactive immune responses can take many forms. In allergic diseases the immune system makes an excessive response to proteins in substances (known as allergens). In autoimmune diseases the immune system mounts a response against normal components of the body:
 - Allergic diseases are extremely common and include food, drug or insect allergy, hay fever (allergic rhinitis), sinus disease, asthma, hives (urticaria) and eczema (atopic dermatitis). Severe allergic reactions (anaphylaxis) are potentially life-threatening.
 - Autoimmune diseases range from common to rare, and include systemic lupus erythematosus (lupus), rheumatoid arthritis and vasculitis.
4. Underactivity of the immune system is also known as immunodeficiency, which leads to infections and/or swellings that can be life threatening in severe cases:
 - Primary immunodeficiencies (PIDs) are caused by defects in the genes that control the immune system, and are usually inherited.
 - Acquired immunodeficiencies include AIDS (acquired immunodeficiency syndrome), that is due to human immunodeficiency virus (HIV).
 - Secondary immunodeficiencies may be caused by immunosuppression treatment, that is often required for recipients of cancer chemotherapy and transplants, to prevent rejection or graft versus host disease.
5. Clinical immunology/allergy specialists in Australia and New Zealand diagnose, treat and manage patients with allergy, primary immunodeficiencies and other immune system disorders. Clinical practice details for these specialists are listed on the ASCIA website www.allergy.org.au/patients/locate-a-specialist

More information: www.allergy.org.au/patients/immune-system

Other Fast Facts: www.allergy.org.au/patients/fast-facts

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