

Primary immunodeficiency

Primary immunodeficiency (PID) occurs when part of a person's immune system does not function properly and cannot get rid of germs, or protect the body from new germs as well as they should.

There are over 150 known kinds of PIDs. They are caused by hereditary, meaning they are passed down from parents to their children, and also congenital factors.

The US's Modell Foundation and Red Cross list 10 warning signs of PIDs. Children showing one or more of these signs should consult a doctor and undergo relevant check-ups as soon as possible:

Eight or more new ear infections within a year.

1. Two or more serious sinus infections within a year.
2. Two or more pneumonias within a year.
3. Two or more deep-rooted infections, e.g. pleural effusion (excess fluid accumulating in the pleural cavity, the fluid-filled space that surrounds the lungs), osteomyelitis (a bacterial infection of bone and bone marrow) and septicaemia (blood poisoning).
4. Persistent thrush mouth (yeast infection of the mucous membrane of the mouth) or elsewhere on the skin, after one year of age.
5. Recurrent, deep skin or organ abscesses.
6. Two or more months on antibiotics with little effect.
7. Need for intravenous antibiotics to clear infections.
8. Failure of an infant to gain weight or grow normally.
9. A family history of PID.

Treatments for PID include replacement therapy and stem cell transplantation. The former relieves the symptoms by supplementing relevant deficient immunity components to the patient while the latter can cure the disease. Special attention should be paid when taking care of PID patients. They should receive specialist pediatric care, including prevention and treatment for infections, monitoring of nutrition, and family education and support.