

## **Immune Deficiency**

Do you or your loved ones suffer from recurrent ear and sinus infections or pneumonia? Did you have a serious and life threatening infection needing hospitalization? Do you get infections with uncommon bacteria? Does it usually take several courses of antibiotics before you clear an infection? Does it take longer than usual for your wounds from surgery to heal? If you answer yes to any of these questions, then it is important that you get evaluated for an immune deficiency disorder.

### **What is immunodeficiency?**

Immune deficiency is a condition where your body's immunological defenses against bacteria and viruses are weak or lacking altogether. When a normal person gets a bacterial or viral infection, the infection is quickly recognized by the body's natural and acquired defenses. They quickly move in, isolate and eliminate the infection at the port of entry before the infection could spread all over. This does not happen in people with immunodeficiency. The infection soon after gaining entry into the body, multiplies, spreads and overwhelms the body. If not recognized and treated quickly by your medical provider, this could result in shock, organ failure and death.

### **How common are immunodeficiency diseases?**

The immune deficiency diseases are of two kinds- primary and secondary. The secondary immunodeficiency diseases are much more common than the primary ones. HIV, cancer, use of immunosuppressive and anticancer drugs, malnutrition, diseases which result in loss of protein in urine and stool are some of the examples of secondary immunodeficiency diseases. On the other hand, the primary immunodeficiency diseases are genetically passed on. The genetic transmission is obvious for some and not so obvious for others. Some may show up at birth and others may not appear until adulthood. Some such as IgA deficiency are common- 1 in 700 people have them. Others such as chronic granulomatous disease are rare- the incidence is 1 in 250,000 people. It is important to realize that none of the primary immunodeficiency diseases are contagious; almost all cases of secondary immunodeficiency diseases (except for HIV) are not contagious.

### **Diagnosis and treatment of immunodeficiencies**

If you suspect that you or your family member may be suffering from an immune deficiency disease, you should consult with a qualified allergist and immunologist. After getting a good history and performing a thorough physical examination, he or she will order special blood tests and other tests to decide if you have an immune deficiency disease. It usually takes 4 weeks to complete all the needed testing before diagnosis and treatment can be fixed.

The nature of specific treatment will depend on what immune deficiency disease you have. Several of the common immunodeficiency diseases are caused by IgG antibody

deficiency. IgG antibody is one of the five antibody proteins your body makes to fight infections. Lack or deficiency of it could cause serious and life-threatening infections. Luckily this antibody deficiency can easily be corrected by intravenous or subcutaneous infusions of IgG gained from other people. Nowadays the screening and quality control procedures for avoiding blood donation from people with HIV and hepatitis are so advanced and strict that transmission of HIV and hepatitis from IgG infusions is next to impossible. In fact no transmission of HIV has ever been reported from these infusions. No cases of hepatitis have been reported since 1991 in this country. Other specific treatment choices are available for other immunodeficiency diseases. Your allergist and immunologist will be able to discuss them with you at your appointment.

### **Common precautions that you and your family could take**

Here are some general precautions you should take if you suffer from an immunodeficiency disease. Avoid sick people and gatherings especially during disease outbreaks. Avoid people with shingles and chicken pox. They are contagious and deadly for people with immunodeficiency. Contact your doctor immediately if you are exposed to them. Wash your hands often. Get current with your immunizations- remember some live vaccines are contraindicated in people with immunodeficiency. Talk with your doctor if you are not sure. Seek medical help immediately if you are not feeling well from an illness, have fever or getting worse instead of getting better after beginning treatment for an infectious disease. Remember you should use antibiotics judiciously and carefully in consultation with your medical provider. However if your medical provider decides to treat you with an antibiotic, he or she should choose the most proper antibiotic at recommended doses for longer than the usual treatment duration. You can learn more about primary immunodeficiency by visiting [www.primaryimmune.org](http://www.primaryimmune.org)

### ***About the author:***

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