

INNATE IMMUNITY AND HEALTH

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The aim of this study was to review the knowledge of the main mechanisms of immune defense against infectious agents of infectious-parasitic diseases. A bibliographic review of the narrative type was carried out with searches of articles published in the last five years, using the keywords: innate immune response, parasites and pathogenesis. It was verified that the immune system acts in a network of cooperation, involving the participation of many structural, molecular and cellular components. In this scenario lies the delicate balance between health and disease, in which both deficiency and exaggeration result in tissue damage. The immune response plays a fundamental role in the defense against infectious agents and is the main impediment to the occurrence of disseminated infections, usually associated with a high mortality rate. It is also known the fact that, for almost all infectious diseases, the number of individuals exposed to infection is much higher than those with disease, indicating that most people are able to destroy these microorganisms and prevent the progression of infection. In contrast, immune deficiencies, whether of innate immunity (phagocytic cell dysfunctions and complement deficiency) or adaptive immunity (deficiency of antibody production or deficiency of T-cell function), are strongly associated with increased susceptibility to infections. Innate immunity: The components of the innate immune system recognize, phagocytize, and trigger defense mechanisms against viruses through pattern recognition receptors (PRRs). Viruses are small subcellular agents that are not able to multiply outside of a host cell (obligatory intracellular parasitism). Each virus is composed of two types of structures; The viral capsid and nucleic acid. Although some viral infections may not be very lethal to the host cells, their intracellular multiplication usually causes damage or death, however, since they depend on the hosts for their survival, viruses tend to establish mild infections in which the death of the host is more of an aberration than a regular result. Notable exceptions are HIV, Ebola virus, Hantavirus and rabies virus that can eliminate the host after an acute infection. These characters measure the evolution of this virus. From this review it was verified that it is clear that the immune system has a great ability to prevent viral proliferation. The different component cells of this system have various ways to prevent the deepening of the viral infection. In the innate immune response, the main immune weapon is the degradation of infected cells and the recognition of viruses by cell receptors.

Keywords: Immune defense; immune system; immune deficiency; cell degradation.

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