Immunity in Virus Infections

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For many years it has been recognized that one attack of certain diseases, now classified as virus maladies, induces an enduring immunity. Because of this fact and since many workers believed that viruses are radically different from other types of infectious agents, there arose in some quarters the idea that immunological and serological phenomena in the virus field differ from those in other fields of infection. This was an erroneous idea because the basic principles underlying serological and immunological phenomena in all fields of biology are identical. These principles, however, may evidence themselves in different manners in the various fields, and the techniques of studying the phenomena associated with them in different fields frequently vary because of the nature and mode of action of the infecting agents. It will be impossible to discuss at this time all the different phenomena and peculiarities associated with immunity in the numerous virus diseases. Therefore, a few general remarks will be made, following which immunological and serological phenomena associated with vaccinia will be discussed in detail.

Immunity is resistance to infection or injury and is demonstrable only in a living host. Such resistance