VIRUS INFECTION OF THE MAMMALIAN FETUS

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Experience extending over a number of years with experimental inoculation of embryos of incubating hen-eggs has demonstrated a high degree of susceptibility of the developing avian cells and tissues to a number of infectious agents including viruses, bacteria, spirochaetes, fungi and protozoa. It is evident that this avian host in its embryonic stage is much more susceptible to several infections than are adult chickens and perhaps more so than the natural host of particular agents concerned.

Indicative of a greater susceptibility of chick embryos as compared with the adult hen or with a mammalian host is the wide dissemination of focal areas of infection within the body of the embryo inoculated in the chorioallantoic membrane with, for example, the viruses of vaccinia or herpes simplex, neither of which causes more than a mild local lesion in chickens, and ordinarily no conspicuous if any disseminated lesions in mammals. It is not to be inferred, however, that avian embryonic cells and tissues can be infected by any virus or other agent, for they possess toward some agents a complete refractiveness that is of the nature of natural immunity.

Experimenters who have utilized mammalian em-
Editor's Summary

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