Interferon induction in human leukocytes after in vitro exposure to cytomegalovirus or Epstein-Barr virus.

Einhorn L, Einhorn S, Wahren B.

Abstract

Interferon (IFN) was produced after exposure of human mononuclear leukocytes and bone marrow cells to infectious or noninfectious cytomegalovirus (CMV) in vitro. The IFN was generated mainly by non-B lymphocytes. Both alpha- and gamma-type IFN could be demonstrated. CMV antigens were usually not demonstrable in CMV-exposed leukocytes. Addition of anti-IFN antibodies did not induce CMV antigens. Thus, it seems that the endogenous production of IFN is not responsible for the difficulties in demonstrating CMV antigens after in vitro exposure of normal human leukocytes to CMV. Addition of Epstein-Barr virus (EBV) B95-8 to leukocytes induced the production of alpha-type IFN. Exogenously added IFN reduced the induction of EBV-determined nuclear antigen (EBNA). However, the presence of anti-IFN antibodies in EBV-infected cultures did not increase the number of EBNA-positive cells.

PMID:
2580812
[PubMed - indexed for MEDLINE]