

SUMMARY

The presence of Fc receptors and HSV-2 antigens on the surface of cervical tumor cells were determined by enzymeimmunoassay, using Fc and Fab fragments of the purified normal human IgG, whole molecule of purified normal human IgG and the antiserum to HSV-2 antigens.

Both Fc receptors and HSV-2 antigens were observed on the surface of HSV-2 infected cells as early as 1-2 hr after infection. The number of Fc receptor and HSV-2 antigen positive cells increased gradually with time of infection and reached maximum at 15 hr after viral infection. Increasing of the number of Fc receptor positive cells was found to be directly related with an increase in number of HSV-2 antigen positive cells. This correlation was observed in all types of cells used in this study.

Cells from fresh cervical tumor biopsies of patients with invasive cervical carcinoma (9 cases with squamous cell carcinoma and 3 cases with adenocarcinoma) were also found to carry Fc receptors and HSV-2 antigens. The increase in the number of Fc receptor and HSV-2 antigen positive cells was demonstrated after cultivation of cervical tumor cells *in vitro*.

The biological significance of Fc receptors on the surface of these cells is not clearly known. Since Fc receptors can be demonstrated on the surface of HSV-infected cells in both productive infection and

latent infection of the tumor cells, the attachment of IgG molecule to the Fc receptors on the surface of HSV-2 infected cells or cervical tumor cells may act as a blocking factor to protect the cells from destruction by cytotoxic antibody and the killer cells.

BIOGRAPHY

Name: PRANEE LEECHANACHAI

Date of Birth: June 1, 1951

Place of Birth: Chainat, Thailand

Institutions attended:

STRICHAINAT SCHOOL, CHAINAT

March, 1967 Certificate of Mathayomsuksa III

AMPORNPIBAN SCHOOL, BANGKOK

March, 1969 Certificate of Mathayomsuksa V

CHIANG-MAI UNIVERSITY, CHIANG-MAI

FACULTY OF MEDICAL TECHNOLOGY

March, 1973 B.Sc. (Med. Tech.)