

CHAPTER VII

CONCLUSIONS

1. The number of HSV-2 isolation by cell culture from 119 patients with clinically suspected genital herpes at Bangrak Hospital and Venereal Disease and AIDS Center 3 Chonburi between June 1997 - February 1998 was 31.9% (38 isolates).
2. The developed ELISA for HSV-2 identification by sandwich ELISA technique found the optimal dilution of rabbit anti-HSV-2 serum, conjugated anti-HSV-2 serum and viral concentration were 1: 4000, 1: 200 and 1×10^4 PFU/ml, respectively. This technique was found rapid and useful.
3. The antiviral activity (ED_{50}) of ACV against HSV-2 strain 186 in pre-treatment, post-treatment and inactivation activity were 0.56, 0.72 and 0.5 $\mu\text{g/ml}$. Antiviral activities of ACV against 38 HSV-2 isolates by inactivation were 0.38 - 0.87 $\mu\text{g/ml}$. Mean of ED_{50} of ACV against HSV-2 isolates was $0.585 \pm 0.1 \mu\text{g/ml}$. This data might be useful for clinicians.
4. In this study, it showed the crude extracts of *C. odollam*, *C. excavata*, *C. amboinicus*, *P. nodiflora* and *T. peruviana* contained antiviral activity against HSV-2. The propensity of active extracts from 5 plants were showed in methanol fraction (F1), chloroform fraction (F2), hexane fraction (F4) and aqueous - hexane fraction (F5). The lowest ED_{50} ($\mu\text{g/ml}$) of *C. odollam*, *C. excavata*, *C. amboinicus*, *P. nodiflora* and *T. peruviana* against HSV-2 isolates were 4.99 ± 0.91 (F5), 8.97 ± 0.76 (F2), 3.57 ± 0.77 (F2), 20.90 ± 3.14 (F4) and 3.04 ± 0.70 (F2), respectively. The results showed 20 extracts from 5 plants inhibited HSV-2 plaque formation by inactivation activity. These extracts should be studied further for their antiviral properties and active compounds.