3836910SITS/M : MAJOR : TRANSFUSION SCIENCE
; M.Sc. (TRANSFUSION SCIENCE)
KEY WORD : HEPATITIS C VIRUS / MHC CLASS II / PCR-SSOPs.

SIRINUCH RAJCHAIBOON : HEPATITIS C VIRUS INFECTION AND MHC CLASS II ASSOCIATION. THESIS ADVISOR : SASIJIT VEJBAESYA, M.D., DR. MED., DASNAYANEE CHANDANAYINGYONG M.D., SIRIRURG SONGSIVILAI M.D. PH.D.,126p. ISBN 974-662-470-9

Hepatitis C virus (HCV) is the major cause of transfusion and community – acquired non-A, non-B hepatitis. Thailand is one of the endemic area for HCV infection with a prevalence of anti-HCV anti-body in blood donor populations of about 1.5%. More than half of HCV-infected patients can not eradicate the virus and develop chronic hepatitis. The mechanism that determines the clearance or the persistence of HCV have not yet been identified; one factor that may influence outcome in HCV infection is polymorphism of the major histocompatibility complex (MHC). There have been no reports on this association in Thai populations.

The purpose of this research was to study the association between HLA–DRB1, DQA1 DQB1 antigens and different type of HCV-infected patients in Thai populations, using PCR followed by sequence-specific oligonucleotide probes (PCR-SSOPs).

The study showed significantly increased frequencies of HLA-DRB1*0405 (20.9% vs 9.3%, $p<0.04$) and DQA1*03011/02 (65% vs 37.1%, $p<0.002$) compared with the normal controls. HLA-DRB1*1404 (7.1% vs 1.1%, $p=0.006$) was found to be significantly increased in HCV carriers group compared to the normal controls. DRB1*0701 (2.3% vs 14.3% $p<0.002$) and DQA1*0201 (0% vs 14.3% $P<0.004$) were also found to be significantly decreased in the patients with HCV-infections and HCV carriers.

These data suggested that MHC class II alleles may be involved in the clearance of HCV and in the protection against chronic infection with HCV.