

ABSTRACT

**THE EXPRESSION CD4 AND CD8 AS WELL AS IL-1 β , IL-2, IL-10,
TNF- α , IFN- γ LEVEL ON IMMUNOPATHOGENESIS
CHRONIC HEPATITIS-C**

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A laboratory study on the patients with chronic hepatitis C was performed to observe the effects of chronic infection hepatitis C virus on the immunocompetent cells.

Two groups were used in this study which were consist of both the patients with chronic hepatitis C and healthy control group. The independent variable is the hepatitis C virus. The hepatitis C virus was isolated from the patients with chronic hepatitis C. They were the blood transfusion donors, who were collected from blood transfusion centers at Dr. M Djamil Hospital, Faculty of Medicine Andalas university.

The aim of this study was to examined the effects of hepatitis C virus on the immunocompetent cells on immunopathogenesis chronic hepatitis C by parametric: value of the CD4+ T-cells and the CD8+ T-cells, level of IL-1 β , IL-2, IL-10, TNF- α and IFN- γ . This study using explanatory design. This study consist of both patients with chronic hepatitis C and healthy control group were taken as samples. Fourty patients with chronic hepatitis C with age around 18-40 years old and 40 healthy samples as control group with age around 25-37 years old. The CD4+ T-cells and the CD8+ T-cells were analysed by using immunohistology examination and the level of IL-1 β , IL-2, IL10, TNF- α , IFN- γ were analyzed by using ELISA method. Identification of hepatitis C antibody was generally with ELISA method and detection of hepatitis C- RNA was by PCR.

Data was analysed by using SPSS 12.1, and $p < 0.05$ was consider to be significantly different.

The result of this study showed that were increasing significant differences between value CD4+ T-cell, CD8+ T-cell, IFN- γ in blood patients with chronic hepatitis C compared to control group. Increasing of CD4+ T-cell, CD8+ T-cell and IFN- γ were found in blood patients with chronic hepatitis C. The level of IL-1 β , IL-2, IL-10, TNF- α were found increase in the blood patients with chronic hepatitis C, but it was not detection in blood healthy control group.

The result of this study concluded that chronic infection hepatitis C virus have given the effects on the immunocompetent cells which the expression CD4+ Tcells and CD8+ Tcells as well as increasing of IL-1 β , IL-2, IL-10, TNF- α , IFN- γ level on immunopathogenesis chronic hepatitis-C

Keywords: Hepatitis C virus, CD4+ T cells; CD8+ T cells; Cytokines IL-1 β , IL-2, IL-10; TNF- α , and IFN- γ