

العنوان بالانجليزية:

Chronic Hepatitis C Infection Has No Effect on Peripheral CD4+CD25+ T-regulatory Cells in Patients with End-Stage Renal Disease

الملخص بالانجليزية:

Background: T regulatory cells (T-regs), through variable mechanisms, play a crucial role in Hepatitis C virus (HCV) chronicity and infection tolerance. A great speculation is posed regarding the level, role of T-regs in end-stage renal disease (ESRD), and the presence of associated factors that could influence the Tregs population. Accordingly, we aimed at studying the effect of HCV infection on peripheral CD4+CD25+Tregs population among patients on hemodialysis (HD) as well as the effect of other comorbidities on these cells.

Patients and methods: A group of 77 patients on HD (32 were HD HCV+ and 45 were HD HCV-) and 80 healthy controls (HCs) were included in the study. Flowcytometric analysis was performed for identification and quantification of peripheral CD4+ CD25+Tregs.

Results: The frequency of CD4+ CD25+Tregs increased significantly in HD patients compared to the HCs ($p = <.0001$ each). HCV posed no effect on peripheral CD4+ CD25+ T-regs in ESRD patients, when comparing HD HCV- and HD HCV+ groups. In the hypertensive HD HCV-, T-regs percentage was higher than that in the non-hypertensive. However, the difference was not statistically significant. No significant difference was detected between HD HCV- and HD HCV+ patients on the count and percentages of T-regs according to the duration of dialysis.

Conclusion: Demonstrating that chronic HCV infection has no effect on CD4+ CD25+ T-regs cells levels in ESRD patients is of great importance to the success of future allografts in such patients.

تاريخ النشر: 6/11/2019