

Prevalence of Human T-Lymphotropic Virus Among High Risk Patients: A Cross-Sectional Study in Jahrom, Southern, Iran

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Abstract:

Background: Human T-Lymphotropic Virus type I/II (HTLV-I/II) are the etiologic agents of human disease as adult T-cell leukemia or lymphoma and a chronic and HAM. One of the major routes of HTLV transmission is parenteral transmission and blood cell products. The aim of this study was to investigate the seroprevalence of HTLV-I/II among high risk patients (β - thalassemia and hemodialysis patients) in Jahrom city. Materials and Methods: This cross sectional study was carried out on 85 β -thalassemia patients and 68 hemodialysis patients among 2012-2013. All samples tested for HTLV (I or II) specific antibody by ELISA method and positive samples were confirmed by Nested-PCR method. Result: Of all 153 samples, 7 (4.6%) samples were positive for HTLV (I or II) specific antibody, including 4 of β - thalassemia and 3 of hemodialysis patients. Of 7 positive for HTLV (I or II) specific antibody, no samples was confirmed with Nested-PCR for HTLV-I/II. This study revealed no significant statistical difference in anti HTLV-I/II prevalence between males and females but showed that prevalence of HTLV-I/II infection correlated with increasing age in hemodialysis patients.

Conclusion: The result of this study shows that frequency of HTLV-I/II in these groups in Jahrom is lower than other city of Iran. Further studies with larger samples are recommended to determine the prevalence of these viruses in other community.

Keywords: HTLV-I/II, β -Thalassemia, Hemodialysis, Seroprevalence