

عنوان مقاله:

ASSOCIATION OF INDUCIBLE NITRIC OXIDE SYNTHASE (iNOS) GENE POLYMORPHISMS WITH
SUSCEPTIBILITY TO VISCERAL LEISHMANIASIS IN THE IRANIAN POPULATION

محل انتشار:

نوزدهمین کنگره بین المللی میکروب شناسی ایران (سال: 1397)

تعداد صفحات اصل مقاله: 1

نویسندگان:

Akram Pourkazem - Higher education Institute of Rab-Rashid, Tabriz, Iran

Behrooz Naghili - Infectious and Tropical Diseases Research Center, Tabriz University of medical Sciences, Tabriz, Iran

Sanya Haiaty - Student Research Committee, Tabriz University of medical Sciences, Tabriz, Iran

Ahad Bazmani Ahad - Infectious and Tropical Diseases Research Center, Tabriz University of medical Sciences, Tabriz, Iran

خلاصه مقاله:

Background and Aim: Leishmaniasis affects about 12 millions of people worldwide and is the main public health problem in some areas of Iran, including East Azarbaijan province. Cell mediated immunity is critical for protection against leishmaniasis. Indeed, studies show that the induction and maintenance of Th1 immune response is necessary for effective clearance of Leishmania parasites. Th1 cells induce iNOS that is responsible for killing Leishmania parasites. According to the important role of cellular immunity against VL, this study was directed to determine the frequency of -954G/C genotypes in iNOS gene. **Methods:** 284 individuals participated to evaluate the frequency of -954G/C genotypes in this study. The study included 93 individuals as VL diagnosed patients, 86 individuals as seropositive healthy controls, and 105 individuals as seronegative healthy controls. iNOS genotyping was carried out using an Amplification Refractory Mutation System-PCR (ARMS-PCR) and gel electrophoresis. **Results:** Molecular analysis revealed an increased frequency of mutant homozygote genotype (C/C) in the case group (4, 4.3%) compared to the seronegative control group (1, 1.0%). Also the frequency of the wild homozygote genotype (G/G) in the seronegative control group (88, 83.8%) was higher than that in the case group (56, 60.2%). A significantly increased risk of leishmaniasis was found in the iNOS genotype [odd ratio (OR) 1.24, 95% confidence interval (CI) 2.0-7.2, p value < 0.001]. Distribution of genotypes were in consistent with Hardy-Weinberg equilibrium. **Conclusion:** These results suggest that iNOS gene polymorphism can be considered as a genetic susceptibility factor for increased risk of Leishmaniasis.

کلمات کلیدی:

Visceral Leishmaniasis, -954G/C iNOS, genetic polymorphism

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/782927>



