

Abstract

Background: Dysphemia or lipid pertussis the most common lipidemic disorder that influence lipid profiles level. The hemostasis and the level of metabolic rate play an important role in dyslipidemia disorder. One of the vital factors that involved in the metabolism is retinoid X receptors (RXRs) as the nuclear receptors. RXRs are a type of transcription factor-dependent ligand that presence in various biological processes and diseases. Hence, it could be discuss as important therapeutic target. Therefore, the present study was conducted to investigate role of retinoid G receptor gene polymorphism (rs2651860) in patients with dyslipidemia reffered to Birjand hospital.

Materials and Methods: This case-control study was performed on 50 patients and 50 healthy individuals from patients referring to the Birjand heart clinic, which matched geographically, age and gender together. In order to investigate rs2651860 polymorphism in retinoid G receptor gene, 2 ml of blood was taken from each person. After DNA extraction and design of specific primers and optimization of conditions, gene polymorphism was studied using ARMS-PCR technique. Data was analyzed in SPSS version 22 using Chi-square test.

Results: The prevalence of TT genotype in patients was 31 patients (62%) and in healthy subjects 40 (80%) ($P = 0.147$). Also, the frequency of GG genotype in healthy patients was 2 (4%) and 1 (2%), respectively ($P = 0.447$). The frequency of T allele was 79 (79%) and 89 (89%) patients, respectively, The frequency of G allele in healthy and healthy subjects was 21 (21%) and 11 (11%) respectively ($P = 0.050$).

Discussion: According to the results, there is not a statistically significant relationship between rs2651860 polymorphism and dyslipidemia. Suggested that more population can showed the precise role of RXRG.

Key words: Dyslipidemia, polymorphism, retinoid X receptors (RXR)



University of zabol

Graduate school

Faculty of science

Department of Biology

The Thesis submitted for the Degree of M.Sc
(in the field of Genetic)

Title:

Polymorphisms at position rs2651860 in the retinoid X receptor gene in
dyslipidemia patients in Birjand city

Supervisore:

Dr. H. kamaladini

Dr.E.Miri moghaddam

By:

Alieh Alidoost

december 2018