

Importance of OGTT for diagnosis of Diabetes in thalassemia major patients

Farzad Najafipour (MD) *¹, Roohangiz Sari Sorkhabi (MD)²
Navideh Haji Aghai (GP)³, Masoomeh Zareizadeh (MD)⁴, Amir Bahrami (MD)⁵

¹Assistant Professor, Department of Endocrinology, Tabriz University of Medical sciences, Tabriz, Iran.

²Associate Professor, Department of Pediatric, Tabriz University of Medical sciences, Tabriz, Iran. ³General Physician, Tabriz University of Medical sciences, Tabriz, Iran. ⁴Department of Obstetric and Gynecology, Tabriz University of Medical Sciences, Tabriz, Iran. ⁵Associate Professor, Department of Endocrinology, Tabriz University of Medical Sciences, Tabriz, Iran.

Abstract

Background and Objective: Thalassemia major is a genetic disorder. Blood transfusion is critical for survival in these patients. Over the course of the past two and three decade's hyper transfusion therapy in these patients has increased significant improvement in life expectancy and quality of life. Unfortunately this type of therapy increased the frequency of complication due to iron overloud. The aim of this study was to evaluate the prevalence of diabetes, impaired fasting glucose and impaired glucose tolerance in patients with thalassemia major, with 10-27 years of age in Tabriz.

Materials and Methods: This descriptive study was done on 56 patients between 10-27 years of age with thalassemia major. The demographic information therapeutic regimen, the age of first transfusion. The level of blood transfusion, the history and dosage of familial history of diabetes, Fe, TIBC, ferritin levels were assessed and recorded. For each patient glucose tolerance test, blood glucose level are performed.

Results: In this study prevalence of diabetes mellitus, impaired fasting glucose and impaired glucose tolerance test were found in 8.9%, 28.6% and 7.1% of patients respectively.

Conclusion: This study showed that despite recent therapy with Desferal in the management of beta-thalassemia major, the risk of secondary endocrine dysfunction remains high. Prevalence of diabetes mellitus, impaired fasting glucose and impaired glucose tolerance test are greater than general population. Endocrine evaluation in patients with thalassemia major must be carried out regularly especially in those patients over the age of 10 years.

Keywords: Thalassemia Major, Diabetes Mellitus, Impaired Glucose Tolerance, Impaired Fasting Glucose

* Corresponding Author: Farzad Najafipour (MD), E-mail : najafipourf@tbzmed.ac.ir

Received 5 Nov 2007

Revised 3 May 2008

Accepted 23 Jun 2008