

## **PREVALENCE OF DIABETES IN THALASSEMIA PATIENTSIN JAHROM CITY: A CROSS-SECTIONAL DESCRIPTIVE STUDY**

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### **Abstract**

**Introduction:** Thalassemia major is a genetic disorderin which the patients require blood transfusion. Regular blood transfusion increases lifetime of the patients. Regular blood transfusionleads to iron deposits in different parts of the body, which causes various complications. Endocrine disorders such as diabetes, is a common complication in this case. The present study aimed to determine the prevalence of diabetes in thalassemia patients with blood transfusion in Jahrom City.

**Methods:** This was a descriptive, cross - sectional study on 120 patients with thalassemia major and thalassemia intermedia. Demographic characteristics, drug therapy (chelation therapy), blood transfusion interval, ferritin level and type of thalassemia were investigated in this study. FBS test was conducted to diagnose diabetes. Data analysis was performed using SPSS 11, descriptive and inferential statistics.

**Findings:** The prevalence of diabetes was 21.7% in this study. The prevalence of impaired glucose tolerance was 3.3%. In total, prevalence of glucose metabolism disorder was determined as 25%. The prevalence of diabetes increases with increased age ( $P < 0.05$ ). Therefore, all diabetes patients were olderthan 10. However, no relationship was found between gender ( $P = 0.131$ ), ferritin level ( $P = 0.833$ ), blood transfusion interval ( $P = 0.432$ ) and diabetes. Nevertheless, ferritin level was above 1000 ng/ml in all diabetes patients. The prevalence of diabetes in those who did not use chelation therapy was higher than others (28.1%). There was no considerable difference between the prevalence of diabetes in patients with thalassemia major and thalassemia intermedia.

**Conclusion:** The results showed high prevalence of diabetes despite treatment with desferal and deferipronein patients with thalassemia. Thalassemia patients should be regularly monitored endocrinology, particularly in age of 10.

**Key words:** DIABETES, THALASSEMIA ,PATIENTSIN, JAHROM