Abstract

**Background and objectives:** Diabetes is a chronic and progressive disease resulting in disability and premature death. The etiology of diabetes mellitus is complex, but factors such as genetic, immunological, and environmental are involved. The aim of this study was to investigate the association between diabetes and blood type.

**Material and Methods:** In this cross-sectional study, blood group of 500 patients with diabetes type 2 was determined and compared with the distribution of blood groups in 11,461 healthy people in Ahwaz. Statistical analysis was performed by independent T test, using SPSS Software (version 17).

**Results:** The patients’ age is between 35 and 80 years. Their blood groups are A (106; 20.3%), B (144; 27.5%), AB (97; 18.5%), and O (176; 32.7%). One hundred seventy-nine (34.2%) cases are Rh+ and the rest (344; 65.8%) Rh-.

**Conclusion:** Regarding the distribution of blood group AB and Rh-, which respectively are 7.3% and 8.4%, the chance of developing diabetes in these people is higher than that in other people (P<0.05). Hence, they should follow a healthy lifestyle from early years of life to reduce the risk of diabetes.

**Key words:** Diabetes type 2, blood group, risk factors