

INVESTIGATION OF SERUM IRISIN,ADROPIN AND PREPTIN VALUES IN OBESE AND NON-OBESE INDIVIDUALS

ShT-03.1-1

S.R. Ali ^{*I}, M. Katar^I, M. Çatak ^{*I}

^IGaziosmanpaşa University, Faculty of Medicine, Department of Biochemistry, TOKAT, Türkiye

Introduction: Obesity is one of the main public health issues growing rapidly all over the world and underlying many diseases especially Type 2 Diabetes Mellitus (T2DM). There have been few studies about newly discovered endocrine factors Irisin, adipon and preptin and their relation with T2DM. In this study we aimed to evaluate these endocrine factors in normal, obese and obese diabetics thereby putting through their relation with T2DM.

Material and Methods: We took Ethics Committee approval on 29.04.2021 (21-KAEK-08). We created groups of obese, diabetic obese, and a healthy controls each including 60 participants. The endocrine factors levels were analyzed with Enzyme-Linked Immunosorbent Immuno-Assay (ELISA) method with the commercial kits. The results were evaluated statistically by using SPSS 20 (IBM SPSS Statistics 20, SPSS inc., an IBM Co., Somers, NY).

Results: There was no significant difference between the groups for age and gender. While Irisin was significantly lower in obese and diabetic obese than in controls ($p < 0.001$), no significant difference was observed between obese and diabetic obese. On the other hand preptin was significantly higher in obese and diabetic obese than in controls ($p < 0.001$), but no significant difference was observed between obese and diabetic obese. In the control group, Irisin and adipon showed strong positive correlation with each other ($r: 0.849, p < 0.001$). In the obese, Irisin and adipon showed strong positive correlation with each other ($r: 0.986, p < 0.001$) while adipon and preptin showed strong positive correlation with each other ($r: 0.982, p < 0.001$). In the obese diabetics Irisin and adipon showed strong positive correlation with each other ($r: 0.960, p < 0.001$) while adipon and preptin showed strong positive correlation with each other ($r: 0.927, p < 0.001$).

Conclusions: Monitoring the levels of these new endocrine factors in obese and diabetic obese will be useful in preventing vital complications caused by .

* The authors marked with an asterisk equally contributed to the work.