

Insulin, Thyroid Stimulating Hormone and Lipid Levels Among Obese Adult Males in Gaza Governorate

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Abstract:

The purpose of this study was aimed to assess the levels of insulin, thyroid stimulating hormone (TSH), glucose and lipid profile among obese adult males in Gaza Governorate.

Research Methodology: The present study is a case – control .

Study tool : TSH and insulin levels were determined using ELISA technique while lipid profile and glucose assayed by enzymatic methods.

Study sample: the study sample comprised 82 obese males aged between 20-40 years. The control group consisted of 82 non-obese individuals .

Conclusions: The mean levels of insulin and glucose were significantly increased in cases compared to controls. In contrast, the mean levels of TSH were lower in cases compared to controls. The mean levels of total cholesterol, triglycerides and LDL were increased in cases compared to controls, whereas the mean level of HDL was significantly decreased in cases compared to controls. The increases in the mean levels of insulin were significantly associated with increasing glucose levels. On the other hand, the relation of insulin with other parameters was not significant. Insulin level showed strong positive correlation with glucose level, this correlation was significant. TSH level showed relatively weak negative correlations with total cholesterol and LDL levels .

Recommendations: Obese individuals must follow diet and do exercise to reduce weight in order to avoid dangerous diseases. Insulin test is a very important test for obese individuals; this test may predict if the obese person is pre-diabetic or not and frequent monitoring of lipid profile is necessary for obese individuals.

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