

Estimation of pro and anti-inflammatory cytokines related with obese individuals in Babylon/Iraq

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Abstract : The current study was designed to assess pro and anti-inflammatory cytokines (IL-6 and TGB- β 1) that may be related to obese adults. The study included 52 people (13 males and 39 females) suffering from obesity (excluded patients undergoing from chronic diseases) and 37 healthy individuals (19 males and 18 females) as a control group with age ranging between 19-40 years. The obese groups were divided into three classes I, II and III depending on body mass index (BMI). The results showed that the majority suffering from obesity were females, and there was a significant difference ($P \leq 0.05$) between obese and control groups regarding the age, sex, and waist circumference (WC). The major distribution of the obese groups according to their classes was located in class I, whereas the class III showing the lowest percentages among other classes. The obese group revealed that a significant increase ($P \leq 0.05$) in the level of TGB- β 1 compared with control group, but there was no significant difference in the concentration of IL-6 between obese and healthy groups, also there were no significant difference in the level of both cytokines between sex of both groups and among the three classes of obesity. The data concluded that the serum level of TGB- β 1 may be one of the main signals for increasing the appetite and development of obesity.

Keywords : Obesity; Cytokines.

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