

The Role of Hypothalamus Mediators in Energy Imbalance

Authors : Maftunakhon Latipova, Feruza Khaydarova

Abstract : Obesity is considered a chronic metabolic disease that occurs at any age. Regulation of body weight in the body is carried out through complex interaction of a complex of interrelated systems that control the body's energy system. Energy imbalance is the cause of obesity and overweight, in which the supply of energy from food exceeds the energy needs of the body. Obesity is closely related to impaired appetite regulation, and a hypothalamus is a key place for neural regulation of food consumption. The nucleus of the hypothalamus is connected and interdependent on receiving, integrating and sending hunger signals to regulate appetite. Purpose of the study: to identify markers of food behavior. Materials and methods: The screening was carried out to identify eating disorders in 200 men and women aged 18 to 35 years with overweight and obesity and to check the effects of Orexin A and Neuropeptide Y markers. A questionnaire and questionnaires were conducted with over 200 people aged 18 to 35 years. Questionnaires were for eating disorders and hidden depression (on the Zang scale). Anthropometry is measured by OT, OB, BMI, Weight, and Height. Based on the results of the collected data, 3 groups were divided: People with obesity, People with overweight, Control Group of Healthy People. Results: Of the 200 analysed persons, 86% had eating disorders. Of these, 60% of eating disorders were associated with childhood. According to the Zang test result: Normal condition was about 37%, mild depressive disorder 20%, moderate depressive disorder 25% and 18% of people suffered from severe depressive disorder without knowing it. One group of people with obesity had eating disorders and moderate and severe depressive disorder, and group 2 was overweight with mild depressive disorder. According to laboratory data, the first group had the lowest concentration of Orexin A and Neuropeptide U in blood serum. Conclusions: Being overweight and obese are the first signal of many diseases, and prevention and detection of these disorders will prevent various diseases, including type 2 diabetes. Obesity etiology is associated with eating disorders and signal transmission of the orexinergic system of the hypothalamus.

Keywords : obesity, endocrinology, hypothalamus, overweight

Conference Title : ICHO 2023 : International Conference on Hormones and Obesity

Conference Location : Paris, France

Conference Dates : February 06-07, 2023