

Obesity: there are more questions than answers

Samorodskaya I. V.

National Medical Research Center for Therapy and Preventive Medicine, Moscow, Russia

See “**Is brown adipose tissue a new target for obesity therapy?**” Drapkina O. M., Kim O. T. in **Review articles**, pp. 134-138

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Samorodskaya I. V. ORCID: 0000-0001-9320-1503.

Corresponding author: samor2000@yandex.ru

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Despite the fact that the term obesity was probably known for a very long time, it began to be considered as a disease less than a century ago. In 1950, obesity was included in the international classification of diseases, and in the 21st century the term *globesity* appeared (combination of 2 words — globality and obesity), reflecting the global significance of the problem [1].

The last two decades of XX century and the first decade of XXI century formed an aggressively negative attitude to excess weight: “you need to lose weight, and immediately, especially if you have health problems”. However, with the accumulation of data, it became clear that not all types of obesity is associated with overeating, as well as overweight, as measured by body mass index (BMI), does not always indicate excess body fat; the proposed methods of weight loss do not always lead to success, and weight loss in obesity is not necessarily accompanied by a regression of chronic diseases and an increase in life expectancy [1, 2].

Simultaneously with studies indicating an association of overweight and obesity with the risk of some chronic diseases, a number of other studies showed the pattern deteriorating logic “obesity — risk of chronic diseases — risk of premature death due to severe complications of chronic diseases”. Patients with increased BMI had a longer life expectancy than patients with normal or decreased BMI, which is why another novel term has appeared — obesity paradox. Further, it became clear that obesity paradox is not even a paradox, but the error of very criterion for assessing obesity based on BMI [3].

At the American Association of Clinical Endocrinologists 23rd Annual Scientific and Clinical Congress (2014), it was proposed to consider obesity as adiposity-based chronic disease. And today, in national guidelines

of different countries, obesity is considered as a chronic recurrent multifactorial (mainly neurobehavioral) disease, in which an adiposity contributes to its dysfunction and biomechanical effects on surrounding tissues with the development of metabolic and psychosocial health complications [2].

Decades of accumulated world experience in weight loss testify to low effectiveness of various diets, pharmaceuticals, surgical and endovascular methods for weight loss. A relatively low effect, the risk of complications, frequent recurrences lead to the creation of a huge number of author’s methods of treating obesity and guidelines of professional communities based both on the results of clinical, population studies, meta-analyses, and on expert opinions and theoretical concepts [1, 2, 4]. It has now become clear that adipose tissue is heterogeneous. Its properties are different depending on localization and structure. The role of brown adipose tissue in glucose and lipid homeostasis, as well as energy expenditure by heat production, is being actively studied. In the article “**Is brown adipose tissue a new target for obesity therapy?**” a relatively new trend in research is considered — the function of brown adipose tissue, modern potential methods of its activation, including methods of stimulating brown adipose tissue with different food ingredients as one of the possible obesity treatments.

Today, almost all modern clinical guidelines agree that there is no one effective method for obesity treatment, and the simplified approach “eat less, move more” does not work at the population level. Prevention of obesity requires changes at the food production level combined with socio-economic changes, while treatment of obesity requires a shift in focus from weight loss to improving patient health characteristics, as well as

a multidisciplinary approach taking into account health status, chronic obesity-related diseases and a person's preferences [1, 2]. In an era when obesity have the status of a global epidemic, the availability of reliable sources of information has become especially important. Currently, the National Medical Research Center for Therapy and Preventive Medicine prepare a publication of multi-authored monograph by Drapkina O. M., Samorodskaya I. V., Starinskaya M. A., Kim O. T., Neimark A. E. **"Obesity: assessment and management of patients"**, which considers modern theories of obesity develop-

ment, the large studies to assess the relationship between obesity and BMI and the development/course of some chronic diseases, as well as pathophysiological links of obesity and various diseases, including coronavirus disease 2019 (COVID-19), and benefits/risks of current obesity treatments. Much attention is paid to the comparison of clinical guidelines of European countries, USA, Australia on the prevention of obesity, cognitive-behavioral therapy, assessment and management of obese patients.

Relationships and Activities: none.

References

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