

PROTECTION AGAINST OBESITY. PREVENTION AND TREATMENT METHODS

Abdumukhtorov Saidislom Dilshodbek o'g'li

Kokand University Andijan Branch

Faculty of Medicine General Medicine Program

Sodiqjonov Shohrukhmirzo Sherzodjon o'g'li

Kokand University Andijan Branch

Faculty of Medicine General Medicine Program

Scientific advisor : **Akhmedov Ulug'bek Bahodirovich**

Annotation: This article is devoted to the problem of obesity (overweight), which is widespread in modern society and poses a serious threat to health. The article covers the main causes of obesity, its negative effects on the body, and effective methods of its prevention. It also provides detailed information on various areas of obesity treatment, including individual diet therapy, increased physical activity, psychological approaches, and, if necessary, pharmacotherapy and surgical methods. The main goal of the article is to provide readers with practical recommendations for the prevention and treatment of obesity, as well as to contribute to improving the health of society by promoting a healthy lifestyle. The study examines the latest treatment protocols and preventive measures used in global and local medical practice.

Keywords : obesity, protection, prevention, treatment methods, unhealthy diet, sedentary lifestyle, genetics, metabolic disorders, cardiovascular diseases, diabetes, hypertension, metabolic syndrome, healthy eating, regular physical activity, weight control, healthy lifestyle, diet therapy, individual diets, exercise programs, psychological support, pharmacotherapy, bariatric surgery, health, wellness, prevention, therapy

Login: Obesity or underweight is a global epidemic that has become one of the most pressing health problems of modern society. According to the World Health Organization (WHO), since 1975, the global obesity rate has almost tripled, and about 4 million people die each year from obesity-related diseases. This situation is of serious concern not only for developed but also for developing countries, including Uzbekistan. Obesity is not just an aesthetic problem, but a complex disease that affects all body systems. It significantly increases the risk of developing cardiovascular disease, type 2 diabetes, hypertension, stroke, some types of cancer, osteoarthritis, and respiratory diseases. In addition, obesity also causes psychological problems: depression, low self-esteem, and social isolation is considered a multifactorial disease resulting from the complex interaction of biological, psychological, social and environmental factors. The main causes include unhealthy eating habits (consumption of high-calorie, fatty and sweet foods), physical inactivity, genetic predisposition, environmental factors, stress and sleep disorders. The development of obesity is mainly associated with a violation of energy balance. When the energy intake (calories) exceeds the energy expenditure, the excess energy is stored as fat. However, this is a more complex process than a simple one, in which the following factors play an important role: Metabolic factors: Basal metabolic rate, hormonal problems, insulin resistance

Genetics: More than 400 genes are associated with obesity, but they only determine the predisposition affects digestion and inflammation. Endocrine disorders: Imbalance of hormones that regulate appetite and tissue, such as leptin, ghrelin, and insulin. Socioeconomic factors play an important role in the spread of obesity. Obesity is more common in low-income groups, due to: The relatively high cost of healthy foods Lack of education and knowledge Limited opportunities for sports and physical activity Stressful lifestyle Psychological aspects. In many cases, obesity is closely related to psychological problems: Emotional eating - eating in situations of stress, anxiety, frustration Compulsive eating disorder. Obesity can develop at any age, but certain periods are at higher risk: Childhood and adolescence - the basis of future health problems Pregnancy and lactation Menopause and andropause periods Old age - due to a slowdown in metabolism The purpose of this article is to comprehensively and systematically cover modern methods of preventing, protecting and treating obesity. The article comprehensively considers not only traditional diets and physical exercise, but also pharmacological treatment, psychotherapy and bariatric surgery. It also discusses the role of the state and society in the fight against obesity , the importance of promoting a healthy lifestyle and multidisciplinary treatment programs are important for patients with obesity . The article aims to provide readers with practical recommendations for the prevention and treatment of obesity, as well as to contribute to improving the health of society by promoting a healthy lifestyle. Obesity has a significant impact not only on the individual but also on the global economy. According to WHO estimates, obesity-related diseases account for about 2.8% of global GDP. This figure represents a financial loss of more than 2 trillion US dollars per year worldwide. In conclusion, combating obesity is not only the individual responsibility of each person, but also a priority task of the entire society and state policy. To shape a healthy future, it is necessary to implement consistent and coordinated measures at all levels.

RESEARCH METHODOLOGY: Metabolic syndrome is based on tissue resistance to insulin. Gastroesophageal reflux disease is one of the most common diseases of the gastrointestinal tract, comparable in frequency to peptic ulcer and gallstone disease. The reflux of acidic gastric contents into the lower third of the esophagus. In approximately 10% of cases, acid reflux is combined with alkaline reflux, that is, the contents of the stomach and duodenum are simultaneously refluxed into the esophagus. Reflux develops in obese people, people who like to eat, especially at night, drink alcohol, coffee , and heavy smokers. Type 2 diabetes is a condition characterized by insulin resistance (cell resistance to the effects of the hormone) and impaired insulin secretion by pancreatic cells. Ischemic heart disease (CHD) is a disease that combines angina pectoris, myocardial infarction, and atherosclerotic cardiosclerosis. IHD develops due to insufficient blood supply to the heart due to narrowing of the lumen of the coronary arteries. Myocardial infarction is the death of a section of heart muscle due to an acute disruption of blood circulation in this area Stroke is an acute disorder of cerebral circulation. Arterial hypertension is the most common disease of the cardiovascular system, characterized by increased blood pressure. Chronic venous insufficiency is a syndrome characterized by impaired venous outflow, leading to disorganization of the regional microcirculatory system. Cholecystitis is an inflammation of the gallbladder. Gallstone disease is a disease in which stones form in the gallbladder or bile ducts. Arthritis is an autoimmune disease that causes chronic inflammation of the joints, and in addition, periarticular and some other tissues, organs and body systems are affected, therefore rheumatoid arthritis is classified as a systemic disease. Deforming osteoarthritis is a chronic non-inflammatory disease of the joints. Polycystic ovary syndrome is an endocrine disease in which the ovaries are enlarged and contain many small, fluid-filled cysts. Oncological diseases are malignant tumors that arise from epithelial cells in the organs and tissues of the body. Epithelial cells have the ability to divide and multiply rapidly. Oncological

diseases develop when normal cells turn into tumor cells. Pancreatitis is an inflammation of the pancreas. Fatty liver disease is the accumulation of fat in liver cells. Erectile dysfunction is the inability to achieve and maintain an erection in men. It is caused by hormonal disorders that develop in connection with obesity and a decrease in testosterone levels, which leads to androgen deficiency. Main part Principles of healthy eating A balanced diet is key to preventing obesity. Studies show that developing healthy eating habits can reduce the risk of obesity by 40-60%. It is important to follow these principles: daily calorie intake to age, gender, and level of physical activity is a basic rule. For example, for adults with moderate activity, 2000-2500 calories per day are recommended. Maintaining the optimal ratio of protein, fat, and carbohydrates (30-20-50%) is necessary for the normal functioning of all body functions. It is important to choose nutritious and low-calorie foods, especially vegetables, fruits, and whole grains. Adhering to a 5-meal diet helps to activate metabolism and prevent excessive appetite. Regular physical activity. Making physical activity an integral part of daily life is an effective way to prevent obesity. According to the World Health Organization, walking or doing light exercise for at least 30 minutes every day reduces the risk of obesity by 25-30%. Doing strength training 3-4 times a week helps maintain muscle mass and improve metabolism. Regular cardio exercises - such as running, cycling, swimming - strengthen the cardiovascular system and allow you to burn calories more effectively. Increasing daily movement (using the stairs instead of the elevator, walking distances) helps increase daily activity. Individualized diets are extremely important in the treatment of obesity. Calorie-reduced diets are the most commonly used method, which involves reducing daily calorie intake to 1200-1500 calories. High-protein, low-carb diets are aimed at stabilizing insulin levels and reducing feelings of fullness. Mixed diets are based on a balanced use of different food groups. Intermittent fasting is based on schemes such as 16/8 or 5/2, that is, fasting for 16 hours and eating for 8 hours. Creating a customized exercise program for each patient increases the effectiveness of treatment. Cardiovascular exercises - exercises that increase heart rate and improve blood circulation. Strength training - exercises aimed at increasing muscle mass and accelerating metabolism. Flexibility exercises - exercises such as stretching and yoga increase body flexibility and reduce stress. Swimming and water sports are a type of exercise that is suitable for everyone, regardless of weight, and puts minimal strain on the joints. Changing eating behavior is an important part of obesity treatment. Cognitive behavioral therapy is a method that focuses on identifying unhealthy eating habits and changing them. Motivational interviewing helps increase the patient's willingness to change. Stress management - aims to eliminate the habit of eating during stressful situations. Overcoming Emotional Eating - Teaching Healthy Ways to Deal with Emotions. Drug treatment is used in cases of severe obesity. Appetite suppressants - act on the central nervous system to reduce the feeling of satiety. Fat-absorbing agents block the body from absorbing fats from food. Drugs that reduce insulin resistance - intended for patients with metabolic syndrome. Hormonal drugs - used for obesity caused by hormonal problems. Surgical interventions are used in cases of severe obesity. Gastric bypass - reduces food absorption by reconstructing the stomach and small intestine. Sleeve gastrectomy - reduces the size of the stomach by removing a large part of it. Gastric banding - limits its size by placing a special band around the stomach. Bariatric surgery - all these methods are performed under strict medical indications. Successful treatment of obesity requires the involvement of various specialists. Dietitian - develops an individual diet plan. Endocrinologist - identifies and treats hormonal problems. Psychologist - helps solve psychological problems. Rehabilitation specialist - helps restore physical activity. A doctor-exercise specialist - creates an individual exercise program. Maintaining weight loss is an important part of treatment. Regular weight monitoring - measuring and recording your weight every week. Maintaining healthy eating habits - practicing healthy eating habits consistently.

Maintaining physical activity - continuing regular exercise even after weight loss. Psychological support - providing psychological assistance to ensure long-term success.

CONCLUSION: The fight against obesity is a long-term and consistent process, in which there is an inextricable link between prevention, treatment and rehabilitation. An individual approach to each patient, a combination of different methods and long-term support are the main keys to success. The important thing is not only to lose weight, but also to form a healthy lifestyle and maintain it throughout life. This requires the active participation of not only doctors, but also the entire society. Forming a culture of healthy eating, encouraging physical activity and creating a psychological support system - all these are important factors in the fight against the obesity epidemic.

REFERENCES

1. Kopelman, PG, Caterson, ID, & Dietz, WH (2022). Clinical Obesity in Adults and Children. Blackwell Publishing.
2. Bray, GA, & Bouchard, C. (2023). Handbook of Obesity: Clinical Applications. CRC Press.
3. Wadden, TA, & Stunkard, AJ (2022). Handbook of Obesity Treatment. Guilford Press.
4. Ministry of Health of the Republic of Uzbekistan. (2023). Obesity: A Comprehensive View. Medical Guide.
5. National Medical University. (2023). Epidemiology of obesity in the population of Uzbekistan. Medical statistical data.